Accessory Catalog

the Portable Companion™

For Osborne Computer Users | Feb/Mar 1983 | USA $2.95

BULK RATE
U.S.POSTAGE
PAID
PERMIT NO. 241
CONCORD, CA 94520

A Tool for Today's Thinker

Creative word processing

Write off your computer

Do two salaries add up?

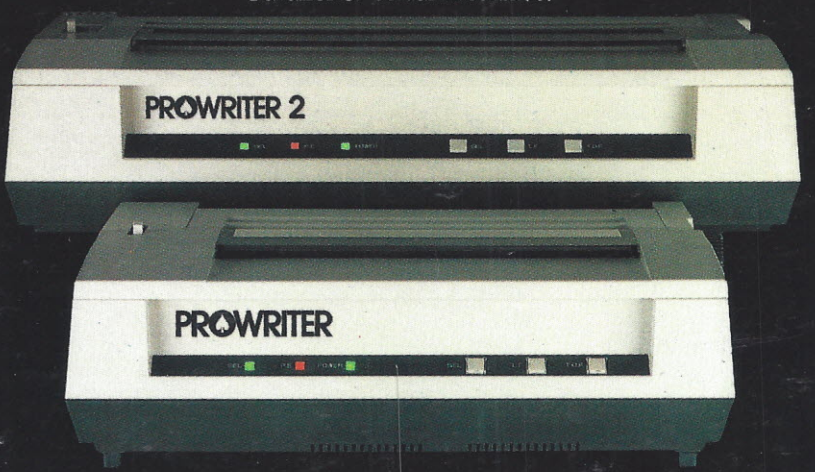
THE LEADING EDGE IN PRINTERS

ONE GREAT LINE. ONE GREAT WARRANTY.

Finally, there's one full family of printers that covers every business or word processing application—all from C. Itoh, a company known for packing more product into less price; and all distributed exclusively by Leading Edge, a company known for searching out and providing that very thing. Which means that one call to one source can get you any printer, any time you need it, for any purpose. All backed by a full years' warranty from Leading Edge. (Try *that* on any other line of printers.)

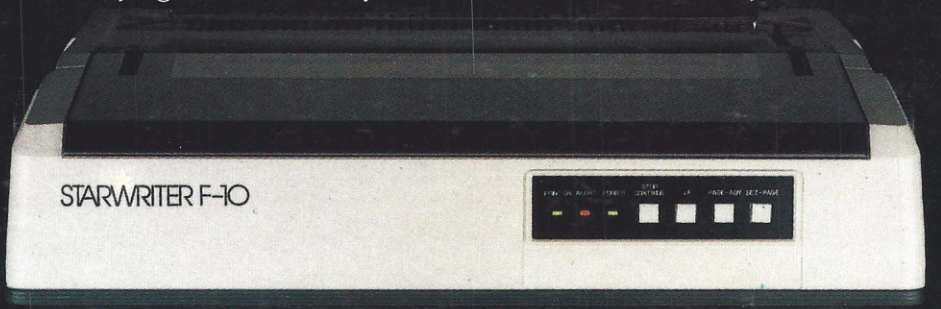
THE PRO'S.

The Prowriters: business printers—and more. The "more" is a dot-matrix process with more dots. It gives you denser, correspondence quality copy (as opposed to business quality copy, which looks like a bad job of spray-painting).
Prowriter: 120 cps. 80 columns dot matrix compressable to 136. 10" carriage. Parallel or serial interface.
Prowriter 2: Same as Prowriter, except 15" carriage allows full 136 columns in normal print mode. Parallel or serial interface.



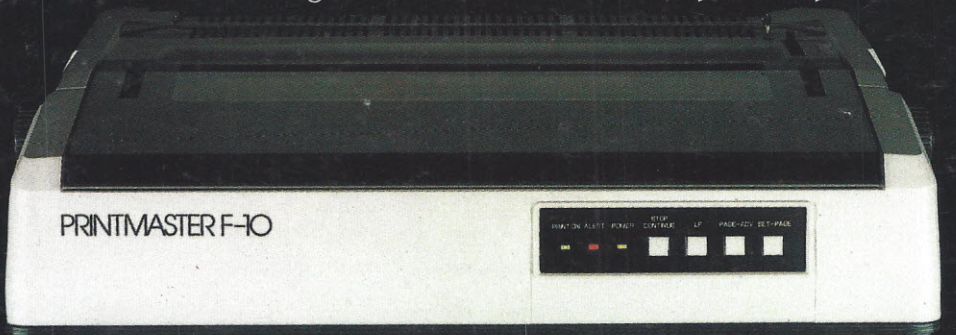
THE STAR.

The Starwriter F-10. In short (or more precisely, in a sleek 6" high, 30-pound unit), it gives you more of just about everything—except bulk and noise—than any other printer in its price range. It's a 40 cps letter-quality daisy-wheel with a bunch of built-in functions to simplify and speed up word processing. It plugs into almost any micro on the market, serial or parallel.



THE MASTER.

The Printmaster F-10. Does all the same good stuff as the Starwriter except, at 55 cps, the Master does it faster.



Distributed Exclusively by Leading Edge Products, Inc., 225 Turnpike Street, Canton, Massachusetts 02021. Call: toll-free 1-800-343-6833; or in Massachusetts call collect (617) 828-8150. Telex 951-624.

DYNACOMP

The Leading Distributor Of Microcomputer Software

PRESENTS

DYNACOMP

APPLE

ATARI

IBM-PC

NEC

NORTHSTAR

OSBORNE

PET/CBM

TRS-80

SUPERBRAIN

CP/M DISKS
DISKETTES

PERSONAL FINANCE SYSTEM:

One of the most complete financial management packages available. Keeps track of all tax deductible items, bank deposits, monthly charges, cash payments and more.

Personal Finance System automatically deducts check fees, gives complete financial summaries for any category on a per item, monthly or yearly basis, prints results in detail or summary form, and even plots results on a monthly bar graph. Available on diskette/disk only. ***Price $39.95 (diskette); $42.45 (disk).***

THE TAX OPTIMIZER

Evaluates various tax alternatives and selects the most advantageous method for preparation of individual Federal Income Tax.

With Tax Optimizer you can easily determine the advantages and disadvantages of projected financial decisions and actions.

Tax Optimizer evaluates several filing approaches and calculates the resulting tax liability for each one. This can be done for a series of years, so you can choose the approach with the overall best tax advantage. Comes with a 14 page instruction manual. Available on diskette/disk only. ***Price $59.95 (diskette); $62.45 (disk).***

THESE ARE ONLY TWO OF THE HUNDREDS OF PROGRAMS AVAILABLE FROM THE DYNACOMP LIBRARY OF SOFTWARE PROGRAMS:

- Business/Utilities
- Adventure
- Personal Finance
- Games
- Education
- Thought Provokers
- Statistics
- Card Games
- Engineering
- And Much, Much More!

Besides being the leading distributor of microcomputer software, DYNACOMP currently distributes software in over 60 countries. DYNACOMP provides FRIENDLY, ACCESSIBLE CUSTOMER SERVICE through our highly qualified and knowledgeable staff. WE'RE AS NEAR AS YOUR TELEPHONE.

DYNACOMP'S prices are highly competitive and we promise prompt processing of every order!

WRITE FOR A FREE, DETAILED CATALOG

Daytime	*24 Hour*	*Office Hotline:*
Toll Free Order Phones:	*Message and Order Phone:*	*9-5 E.S.T.*
(800) 828-6772 (800) 828-6773	*(716) 442-8731*	*(716) 442-8960*

DYNACOMP, INC.
1427 Monroe Avenue • Rochester, NY 14618

Stop - Don't Buy.

MAILGRAM SERVICE CENTER
LAS VEGAS, NV

western union Mailgram

TO: FELLOW OSBORNE USERS

STOP! DON'T BUY A LETTER QUALITY PRINTER...
UNTIL YOU SEE THE FANTASTIC NEW TRANSTAR 130!

IT'S THE PERFECT COMPANION FOR THE OSBORNE:
THE FIRST LOW COST DAISY WHEEL PRINTER WITH

- BIDIRECTIONAL PRINTING
- PROPORTIONAL SPACING
- BOLDFACE, SUPERSCRIPTS, SUBSCRIPTS
- A NEW AUTOLOAD FEATURE
- AND NO SOFTWARE PROBLEMS: IT TAKES FULL ADVANTAGE OF WORDSTAR™ FUNCTIONS

BUT BEST OF ALL IS THE PRICE TAG: ONLY 895!

ISN'T THIS WHAT WE'VE BEEN WAITING FOR?

Transtar

P.O. Box C-96975 Bellevue, Washington 98009

WordStar is a registered trademark of MicroPro International Corporation.

Three good deals for Osborne™ users.

SuperCalc™ is already a good deal—the very best electronic spreadsheet you can own. Since you've been using it all this time, you already know that. Now, we're offering three very good deals so you can get even more out of SuperCalc than ever. Just send us the coupon for the good deal of your choice.

#1: The AnswerCard™

Here's a quick reference guide to help you get the most out of your Osborne SuperCalc quickly and easily. Send $1.

#2: Sorcim Newsletter

Every issue of our SuperNews includes tips on new applications, template building, news from our programmers and development, and more.

#3: SuperWare™ Poster

A large (24" x 32") full-color poster: "Fly Sorcim SuperWare." Send $1 for handling and postage. (Limited supply available.)

Coupon #1
Quick, send the AnswerCard. My $1 is enclosed.

Name_____

Title_____

Company_____

Address_____

City, State, Zip_____

Coupon #2
Yes. I want to receive SuperNews.

Name_____

Title_____

Company_____

Address_____

City, State, Zip_____

Coupon #3
I can't wait to see my SuperWare poster!
My $1 is enclosed.

Name_____

Title_____

Company_____

Address_____

City, State, Zip_____

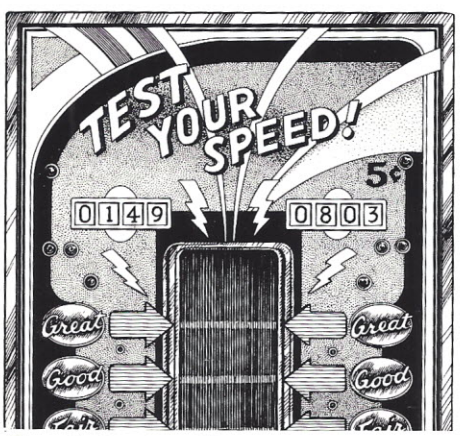
SuperCalc
by Sorcim

SORCIM
WE LEAVE THE REST BEHIND.
Sorcim Corporation
2310 Lundy Avenue, San Jose, CA 95131
408/942-1727

the Portable Companion™

Word Processing . . . In this issue we explore many applications of creative word processing.

Dragons Blood and Lampblack
See page 27



How fast are you?
see page 43

FEATURES

27 DRAGONS BLOOD AND LAMPBLACK
A philosophical look at word processing and writers of today and yesterday

28 SORTING NOTES WITH MAILMERGE — Novice
The art of story construction via detailed notekeeping

34 WORDSTAR FOR THE ACADEMIC — Novice
preparing term papers, reports and dissertations

37 FILLING IN FORMS — Intermediate
Creating and filling in custom-made forms in WordStar

43 TEST YOUR REACTION TIME — Novice
A quick program for the adventurous

46 TOO HOT TO HANDLE
Berkeley, California's computerized fire research center monitors the causes and behavior of blazes

50 TAX DEDUCTION
Yes, you can take a deduction for your computer if you use it in business

52 DOUBLE TROUBLE OR VALUE? — Intermediate
Finally a way to pin down whether two salaries really payoff

USER'S GROUPS

56 ALL THE SCOOP ON DOUBLE DENSITY

59 AUTO STARTING

65 A PROGRAM TO CREATE PRINT STATEMENTS

67 A TYPEWRITER BECOMES A PRINTER

DEPARTMENTS

9 START UP
11 FROM THE FOUNTAINHEAD
15 LETTERS
20 WIZARD OF OSBORNE
70 NEW PRODUCTS
78 REVIEWS
85 CALCAIDS
92 dBASICS
96 PUZZLER
100 SOURCES

MAIL IT THROUGH MICRO LINK II©

There are several data communication programs for microcomputer systems. Some have more capabilities than others. Some are customer-proven—others are not. Most are technically-oriented and difficult to use—THE MICRO LINK II is user-friendly.

MICRO LINK II is a versatile, easy-to-use communications program for CP/M® and MS-DOS™ systems. Development of the MICRO LINK II was based on input from thousands of data communications users. In other words, it was designed by and for the user...the non-technical user.

MICRO LINK II conducts keyboard conversations, sends and receives any text, data or program file type. It saves all or selected parts of a transmission on disk up to the capacity of the disk drive. Several file-sending methods are available, including prompted line-by-line transmission.

Join the thousands of people whose computer reaches out to the world with THE MICRO LINK II.

MICRO LINK II is **$89** plus destination charges.

MICRO LINK II
ELECTRONIC MAIL

Micro Link II requires CP/M 2.2, CP/M-86™ or MS-DOS and a serial port.

Formats: 8″ SS/SD, Apple II with CP/M, 5¼″ and 8″ Xerox 820, IBM PC and many other popular microcomputer formats.

Trademarks: The Micro Link II is a trademark of Wordcraft.
CP/M is a registered trademark of Digital Research, Inc.
CP/M-86 is a trademark of Digital Research, Inc.
MS-DOS is a trademark of Microsoft.

For More Information See Your Computer Dealer or Contact Us Directly.

SOFTWARE
SOFTWARE
DIGITAL MARKETING
DIGITAL MARKETING™

DIGITAL MARKETING CORPORATION

2670 CHERRY LANE • WALNUT CREEK • CALIFORNIA • 94596
(415) 938-2880 • Telex 17-1852 (DIGMKTG WNCK)

Dealer Inquiries Invited. Dealers outside California call (501) 442-0864. Inside California call (415) 938-2883

FIREFLY©
BATTERY PACK/U.P.S.

"THE INDEPENDENT POWER SOURCE THAT LASTS!"

- High efficiency voltage dividing network allows the FIREFLY to run 50%-250% longer than *any* other independent power source made for the Osborne, while costing less.
- Will run on charge from automotive cigarette lighter.
- Optional U.P.S. (uninterruptible power supply) protects your data from voltage spikes or blackouts when operating from A.C. wall current. Its efficient toroidal design is so small that it mounts inside the FIREFLY.
- Reduces the heat generated inside your computer by approximately 50%, this greatly expands the life of vital components and prevents breakdowns.
- To get a FIREFLY — see your local computer store or contact us directly.

COMPARE AND SEE WHY FIREFLY PROVIDES LASTING VALUE

	FIREFLY	BITS	OSBORNE
Field Tested Comparison of Running Time*	3½ Hours	2¼ Hours	70 Min.
Stand Alone Time	4½ to 6 Hours	3-4 Hours	1½-2½ Hours
Battery Monitor	4 State LED and Warning Buzzer	6 State LED Only	Discharge Buzzer Only
Weight	Approx. 13 lbs.	Approx. 13 lbs.	Approx. 9¼ lbs.
Uninterruptible Power Supply	High Efficiency Toroidal U.P.S. Mounts Inside Battery Pack	Standard U.P.S. (In Separate Box w/no Handle or Strap)	None Available
Field Tested Recharge Time	24 Hrs. Standard 3-4 Hrs. U.P.S.	24 Hrs. Standard 7-8 U.P.S.	24 Hrs. Standard No Quick Charger Available
All Components Fit Inside One Case	Yes (Including U.P.S.)	No	Yes
Warranty	1 Year	1 Year	90 Days
Dimension	4½x6½x9½	3¼x9¼x9 plus 4¾"x7"x2½" U.P.S.	4x6x8
Suggested Retail	$229.00	$295.00	$345.00
Case	Brown Vinyl Clad Wood With Metal Reinforcements Removable Top With Built In Storage For U.P.S.	Pressed Felt Particle Leatherette	Pressed Felt Particle Leatherette
Strap	2" Wide Removable Non-Slipped Backed Fabric	½" Fixed Plastic W/Pad	½" Fixed Plastic Only
Booster Pack Availability	Yes	No	No

— FIREFLY Battery Pack $229
Optional U.P.S. $99
— FIREFLY Booster Pack (doubles the battery packs power) $169
— FIREFLY 9" High Resolution Monitor (runs from FIREFLY) $244

Gamma Research
6253 Hollywood Blvd. #711
Los Angeles, California 90028
(213) 463-2345

the Portable Companion™

publisher
Thom Hogan

business manager
Ginger Taylor

editor
Jackie Rae

technical editor
Brad Baldwin

special contributor
Adam Osborne

contributors
Barbara Elman
John Gaudio
Dave Gute
Michael McCarthy
Robert Morgan

production manager
Meredith Ittner

art direction
Roeth/Olson Design Associates

art production
Cynthia Heier
Ron Walter
Brendan Ward

advertising/circulation manager
Deanna D'Zamba

circulation coordinator
Siobhan Stewart

user group liaisons
Frank Morton
Scott Rainey

Illustrations by Larry Baumgardner.
Cover art and direction:
Steve Yamaguma and Associates
Cover Photo by C&I Photography:
Mike Easely
Typesetting: Type Plus, Palo Alto, CA

The Portable Companion is published bimonthly by Osborne Computer Corporation as an aid in helping Osborne 1 owners understand and use their computer.

Send subscriptions, change of address forms, USPS Form 3579, and any other material to **The Portable Companion,** Osborne Computer Corporation, 26538 Danti Court Hayward, CA 94545. (ISSN 0732-7501). Subscriptions are $25.00 for twelve issues. Call for information regarding foreign subscription rates. (415) 887-8080.

The entire contents of this issue of **The Portable Companion** are copyright 1982 by Osborne Computer Corporation. All rights are reserved, and duplication of the contents of this publication in any form or manner without the prior written permission of Osborne Computer Corporation is illegal.

Osborne 1, CalcAids, The Wizard of Osborne, From the Fountainhead, and **The Portable Companion** are all trademarks of Osborne Computer Corporation. SuperCalc is the trademark of Sorcim. dBASEII is a trademark of Ashton-Tate Inc.

Microsoft, is the registered trademark of MBASIC. WordStar is the registered trademark of MicroPro International. CBASIC and CP/M are the registered trademarks of Digital Research.

DATABANK: DATA MANAGEMENT FOR AMATEURS

Even "Drac" has trouble convincing people he's an amateur when they see the results he gets on his Osborne 1 ™ with DataBank!

DataBank software and the Osborne 1 system are a powerful combination for creating information management and records processing systems the way you want them.

And, you can do it yourself...even if you've never touched a computer before! There's no cryptic "computerese" to learn with DataBank...it speaks plain language.

Ease of use doesn't limit DataBank's power or performance. All the functions you'll need are packaged in one unified software system: on-line data entry, up to 50 data fields per record, high speed sorting by up to ten (10!) data fields, 10 levels of record selection on all output (reports, letter merges, etc.), reports with arithmetic, query, letter merge, mailing labels, formatted disk file output, and utilities to define your own files, screen formats, menus and reports.

DataBank provides a direct, documented interface with your Osborne's WordStar* Program for letter merges. And, you have a choice: let DataBank read and merge your document; or output a formatted file to disk to use with MailMerge*.

Tight on disk space? There's no need to reserve work areas with DataBank. Assembly language sorts are done in place to optimize available disk storage. Files can span disks too! Up to four drives, including Winchesters, can be used for a single DataBank file. That can mean over 10,000 names per MegaByte on a mailing list!

Want to get into customization? DataBank includes a powerful, well documented MBASIC Subroutine Library for your specialized requirements. It's supplied on the disk in source code so you can see how DataBank works. Using the library, even an amateur BASIC 'grammer can look like a pro in no time.

Documentation? The best...rated excellent by InfoWorld. Over 150 well written pages will "hold your hand" while you put DataBank to work.

Eight sample information systems are included: a mailing list, inventory, correspondence system, word processing log, client/vendor file, real estate listings, student file, bank loan records. With these, DataBank is up and running the day you get it!

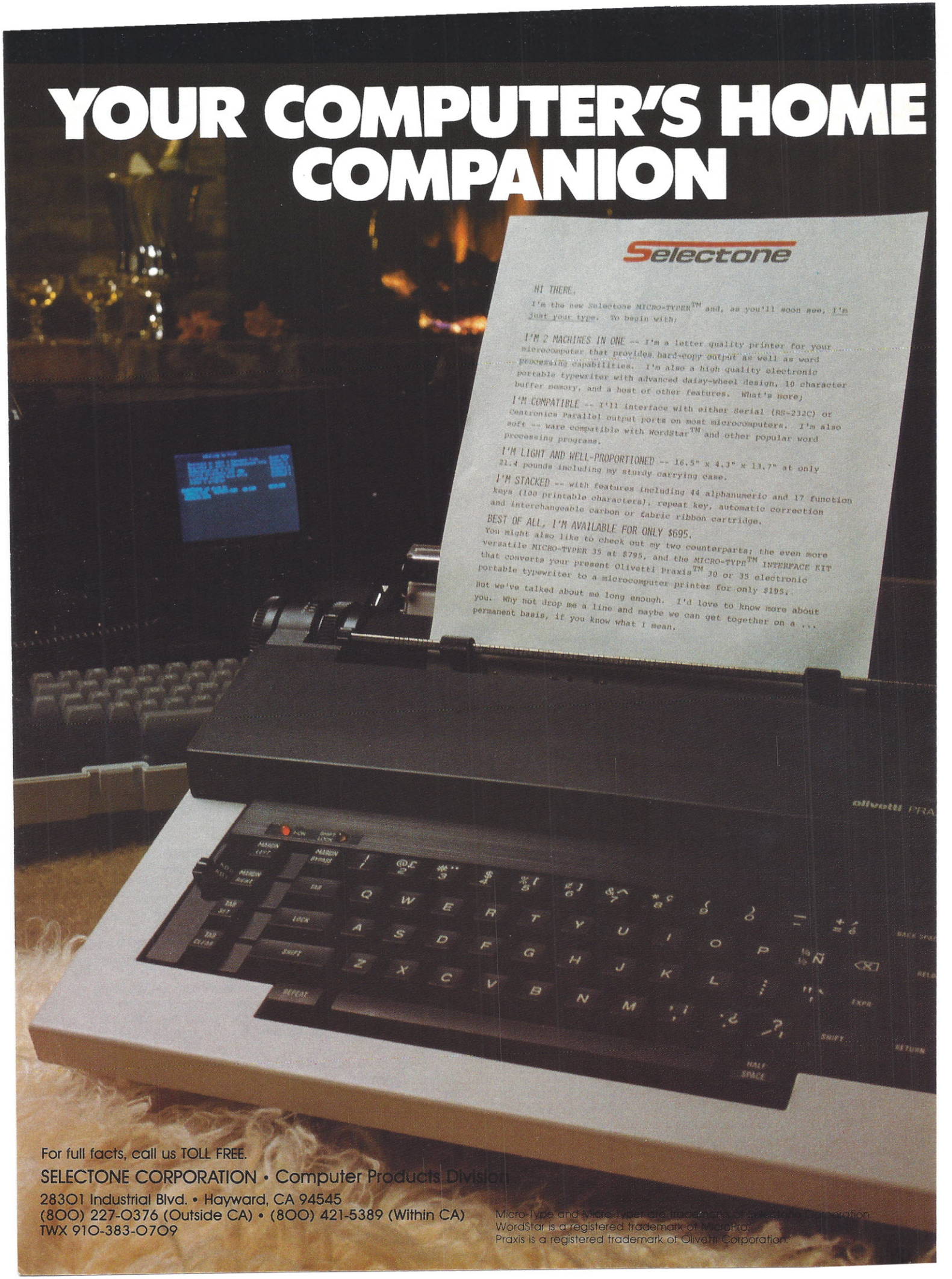
DataBank costs $249. And, it gives you more than other software that costs lots more. Delivery is off the shelf, so get it for your system today. Contact your Osborne Dealer or Data Access Corporation.

DataBank, the data management system for amateurs.

DATAACCESS® CORPORATION
4221 Ponce De Leon Boulevard
Coral Gables, Florida 33146
(305) 446-0669

*Wordstar and Mailmerge are trademarks of MicroPro International

YOUR COMPUTER'S HOME COMPANION



For full facts, call us TOLL FREE.

SELECTONE CORPORATION • Computer Products Division

28301 Industrial Blvd. • Hayward, CA 94545
(800) 227-0376 (Outside CA) • (800) 421-5389 (Within CA)
TWX 910-383-0709

Micro-Type and Micro-Typer are trademarks of Selectone Corporation.
WordStar is a registered trademark of MicroPro.
Praxis is a registered trademark of Olivetti Corporation.

Start Up

In the beginning there was the word. With the advent of word processing the floodgates of word inflation have finally been thrown open. As I sift through the correspondence this magazine receives each day, an interesting phenomenon has begun to surface. The word processor has made great strides toward eliminating that dreaded malady (cringe) "writer's block." Unfortunately, in some cases the proverbial cure is worse than the complaint.

As I pore over a 1,500 word manuscript that an enthusiastic author has stretched to 4,000, I suspect that editors will pay the price for all this artistic freedom. Imagine the state James Joyce's poor editor would have been in if Joyce had composed *Ulysses* on a word processor. War and Peace might have become War and Peace and The Plight of the Russian Veteran had Tolstoy owned an Osborne 1.

In self defense, I've taken to fantasizing software programs that take up arms against this sea of hyperbole. As voice activators for computers become commonplace why not take this chatty idea a step further. By imbuing the computer with the voice of a figure the writer admires (or fears) overworked editors across the country might be spared the drudgery of the paper avalanche.

John Houseman, for example, could enunciate from the computer's voice box when a young attorney went astray with a not-so-concise legal brief. Houseman's ascerbic "we are in the business of law, Ms. Clark, not scholarly research," would swiftly bring her back in line.

When an overexcited romance writer wandered off the garden path, Danielle Steele or Barbara Cartland could skillfully reprimand her. "Enough conversation honey, get them into bed." The ghost of Raymond Chandler could wearily admonish the digressive detective writer "Quite with the loving descriptions of the frail and get to the point buddy."

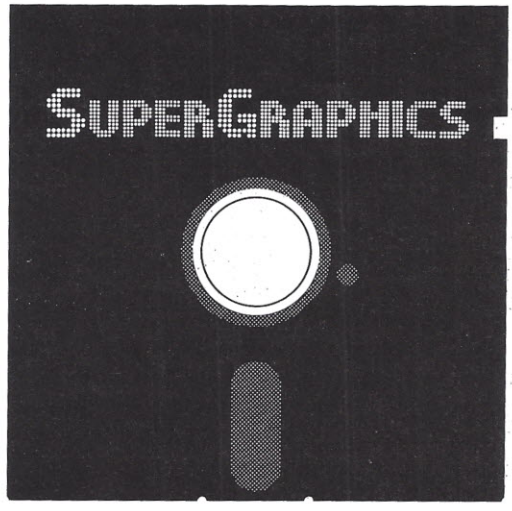
Certain distinctive voices would be especially effective in my scenario. Truman Capote's wincing whine ("Really darling, your use of hyperbole is too precious") would definitely curb any temptation to pontificate. A special feature could be offered for academics by which an intimidating professorial voice would interject "No thesis, no thesis," causing the computer to promptly eat your words.

Of course too much of a good thing could be dangerous. Instead of "user friendly" programs we could end up with "user abusive." And after all, an editor could be plagued with the opposite problem: a lack of material. Without the computer, weary writers would still be hunting and pecking their way through a 1,500 word piece with 344 typos and sporadic weak transitions. The editor could no longer slip in the diskette and blip out an offending passage. A distinct advantage.

Nevertheless, in a case where the medium is in danger of drowning the message, the "abusive editor" could prove an indispensible aid. Now, how about a program for insensitive, ungrateful editors?

Jackie Rae
Editor

The program that writes programs! Graphics for your Osborne™



SUPERGRAPHICS IS EASY.

Paint pictures directly on the screen - no programming is required on your part.

Command menus make the selections fast and easy.

Help Screens eliminate code memorization.

Current prompt line means you never get lost. SuperGraphics lets you know what to do next.

Arrow key controlled cursor movement makes screen changes simple.

Row and Column Counters provide handy "present location" reference points.

Convenient REPEAT key cuts keystrokes to a minimum.

HOME key provides rapid cursor relocation.

Single-touch commands keep the action moving.

On-screen UNDERLINING with automatic advance is yours with a single keystroke.

GREAT DOCUMENTATION!
Easy reading instructions take you step-by-step from turning on the power switch to completing your first moving graphic. Each command explained in plain English. Most instruction manuals have a Table of Contents but no INDEX. This one has both so you can find the information you want quickly.

"OSBORNE" is the trademark of Osborne Computer Corporation.

UNLEASH THE SCREEN GRAPHICS HIDING IN YOUR OSBORNE! Beginner or expert, you'll be astounded at how easily you can paint pictures DIRECTLY on your screen. Then you'll be left speechless as SuperGraphics takes your painting and automatically WRITES a perfect Basic program which will reproduce it! That's right, SuperGraphics writes Basic programs for you and SAVES them to disk even if you've never written a line of Basic in your life. If you ARE an Osborne Basic programmer, you can include these graphics programs into your own programs, giving them a sparkling, professional look. With SuperGraphics you can even make MOVING GRAPHICS! Try your hand at games. If you own an Osborne computer SuperGraphics is the tool you've been waiting for. SuperGraphics. Written exclusively for your Osborne. A bargain at

SUPERGRAPHICS IS POWERFUL.

All 255 Osborne characters are available to you, including all 31 graphic symbols.

HALF-INTENSITY at the touch of a button. Space-by-space control.

Four different FULL-SCREEN "MOVES" let you shift or center your painting on the screen easily.

Block Move lets you MOVE JUST PART of your painting to any other place on the screen.

Block Clone lets you COPY JUST PART of your painting and place the "clone" anywhere on the screen!

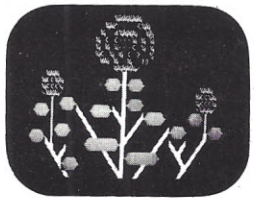
IMAGE RECALL feature lets you save paintings in progress and recall them later for more work or changes.

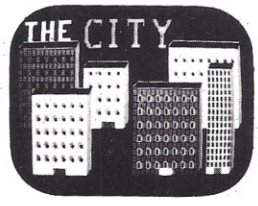
AUTOMATIC PROGRAM GENERATION feature writes programs which will reproduce your finished paintings. SuperGraphics automatically RESETS, specifies the drive, adds the extension, lets you select the beginning line number, and even writes identifying REM statements in the program for your convenience.

MOVING GRAPHICS are now possible. All SuperGraphics programs are automatically saved in a format ready for Merging. Just string several SuperGraphics program "modules" together to create convincing "movies"!

SuperGraphics was written by Eric S. Ruff.

$29.95

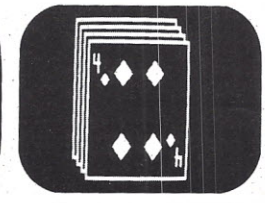




Charge it now over the phone to your Mastercharge or Visa. Call (813) 681-0194. 24 hours a day/7 days a week, or

Mail your check for $29.95 with your name and address to Ruff Software, Box 98, Plant City, Florida 33566.

All orders shipped first class within 24 hours.



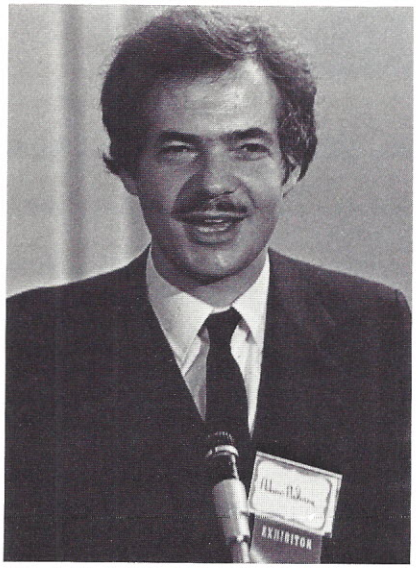
from the Fountainhead

Will micros eliminate "typing phobia"

Adam Osborne

Word processing is one of those fancy terms that we attach to a relatively simple task: typing.

But there are some interesting ramifications to the use of microcomputers in word processing. Specifically these ramifications will have more impact than any other aspect of microcomputers in changing the white collar work place.



Nowadays typing is left to secretaries. Very few white collar professionals ever bothered learning how to type. They stumbled through school without this skill and now hide behind the lame excuse that they don't know how to type; there is something mildly perverse about this admission. While apologizing for an inadequacy, the statement seems to imply: "I am the better for it."

No one who cannot type is the better for it.

Until the arrival of word processing, white collar workers could delegate typing to secretaries because typing was not only slow, but also tedious, in that most typists make mistakes that need to be corrected.

This problem feeds on itself. People who had never learned how to type were terrified of a typewriter because errors were so frequent and so time consuming to correct. To avoid errors you had to not only learn how to type but to keep practicing. A white collar worker who would have happily typed two or three letters a day could not afford to spend the added time that keeping up good typing skills requires.

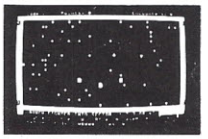
Now that has all changed.

You can be a lousy typist but given a word processor it hardly matters. If you make one mistake in ten key strokes, you will still get your letter written in roughly the same amount of time as the world's best typist. Moreover the white collar worker typing his or her own letter on a word processor would probably skip one or two editing steps and get the job done even faster.

Suddenly the economic imperative moves from having secretaries type to having white collar workers do their own typing-via a word processor.

CAN YOU MANAGE YOUR RESOURCES?

Fine tune your management skills as the commander of Starbase 062151. Allocate scarce resources in your defense. Starbase Commander is an arcade-style game that uses the full video capabilities of your Osborne 1 to emulate the video display of a large computerized tactical defense system. Your video monitor displays real-time on-screen values for resources of fuel, lasers, ion torpedoes, and shield strength plus radiation level and score.



Starbase Commander

Starbase Commander uses Osborne graphics to show 'Klang' alien battle cruisers maneuvering to attack your starbase, firing lasers. The more you fight back the harder they attack. Your fighters have two weapons, controlled by separate keyboard keys, but watch the radiation level.

You decide where to launch your fighters. Then clear a sector of enemy battle cruisers and launch a robot refueling ship to resupply your fighter before you run out of fuel or weapons. There is even a 'help' screen.

Starbase Commander has the imaginative quality of an adventure game with the fast action graphics of an arcade game. Order yours today.

WHAT IF I LOSE?

If you lose Starbase Commander you will be captured by the evil 'Klang' aliens. Win freedom from your captors by defeating a series of increasingly hostile gladiator robots in our Robot Gladiators game. Win and become a prince, lose and become a slave.

Both games, Starbase Commander and Robot Gladiators, run in fast machine language. The instructions are on the game disk.

ORDERING INFORMATION

Please send check or money order for $19.95 for one game, or $35.95 for both, plus $2 postage and handling per order to Mindware, Dept. PC1, P.O. Box 1718, New Rochelle, NY 10802. For orders shipped to N.Y. State please add local sales tax.

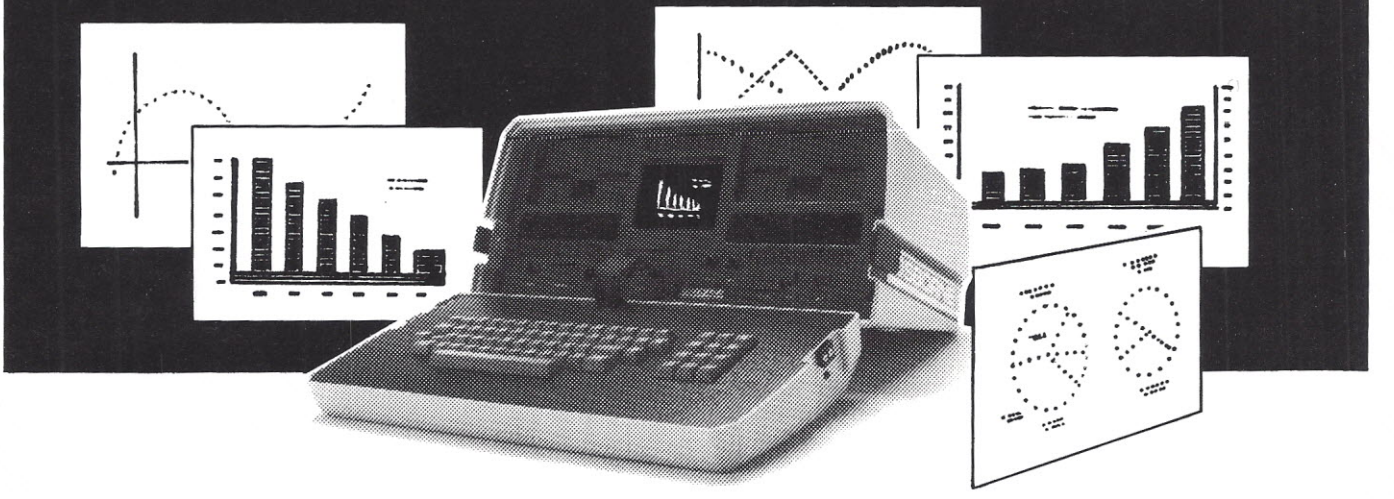
MINDWARE©

WE CHALLENGE YOUR MIND. NOT JUST YOUR REFLEXES.

DEALERS—WRITE FOR OUR ATTRACTIVE MARKETING PLAN!
COPYRIGHT, 1982 E. PAUL COHN, INC.
OSBORNE 1 IS A TRADEMARK OF OSBORNE COMPUTER CORP.

Now Available At Last!!!

Introducing GRAFIKS



Low Cost Professional Graphics for only $125.00

Now it's easy to create professional bar charts, line graphs, scatterplots and pie charts on your screen or printer. Custom designed for the Osborne 1, GRAFIKS pulls your standard software together and brings it alive. Create a graph in only minutes with our user-friendly menus. Generate graphic data with your own CBASIC programs and let GRAFIKS produce instant graphic output. We even supply sample CBASIC programs. Or, tell GRAFIKS to read a portion of your SUPERCALC files and transform these numbers into pictures. Once you've created and proofed your graph on the CRT, print it. We support over ten popular printers, including Epson, Okidata, MPI, Seikesha, and others. Finally, store your graphs on disk for later use or update. When your work is finished, play with the Osborne. We give you easy access to all 32 Osborne graphic characters. So have fun!

THE ONLY TOTAL GRAPHICS PACKAGE WHICH OFFERS:

- Bar graphs, pie charts, point plots, free form labeling, superimposed graphics, autoscaling.
- Capability of supporting all popular dot matrix printers.
- The ability to interactively create and edit graphics on the CRT.
- Compatibility with standard Osborne software — SUPERCALC files and CBASIC programs.
- Low cost, professional graphics on both the CRT and your printer.
- User-friendly menus.

Acquire GRAFIKS from your local dealer or contact us directly. Specify single or double density.

California residents add 6½% tax.

ROBONICS
901 Manhattan Ave.
Hermosa Beach, CA 90254
(213) 376-1750

Osborne 1 is a trademark of Osborne Computer Corporation;
CBASIC is a registered trademark of Compiler Systems;
SUPERCALC is a registered trademark of Sorcim Corporation.

from the Fountainhead

What is really interesting about this scenario is the fact that people normally talk about computer phobia. And yet it is microcomputers that will likely eliminate typing phobia.

Someone who cannot type approaches a typewriter keyboard with terror, quite certain that they cannot possibly type an entire document error free and uncertain as to the effectiveness of their error correction. Now, suddenly errors don't count and they can approach the keyboard with all the naive enthusiasm of a child learning how to speak and not caring when people laugh at their speech mistakes.

But the economic imperative of word processing still is influenced by the difference between the cost of a word processor as compared to a typewriter.

When a business can buy an electric typewriter for $1000 dollars, while a word processor (with printer) costs at least $3,000, the business will continue buying electric typewriters.

In the home people will buy $300 typewriters and continue doing so until word processors approach this low price. The day when all typewriters will be replaced by microcomputer word processors is therefore, a few years away.

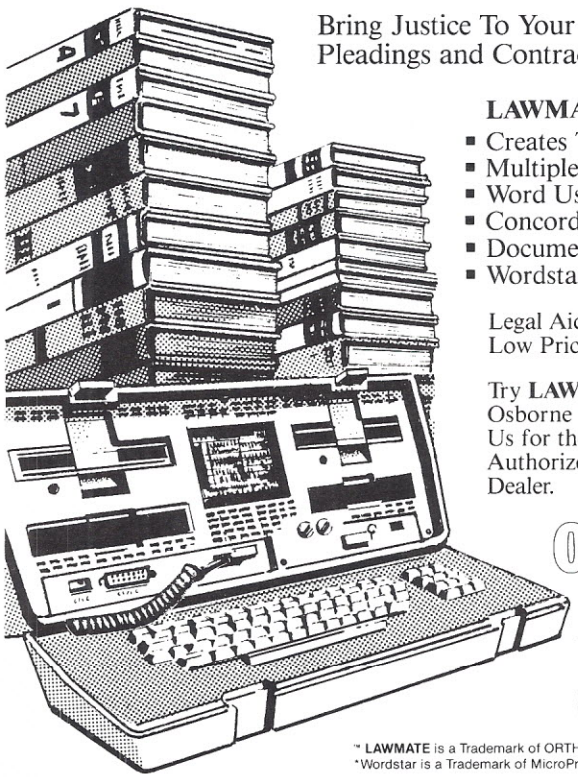
But the typewriter industry had better keep an eye over its shoulder.

(Dr. Adam Osborne is currently penning a science fiction book when he can find time away from his corporate responsibilities. He hopes to complete "Opiates of the Intellect" *sometime in the next few months.)*

DUCES TECUM

LAWMATE™

Bring Justice To Your Documents, Briefs, Pleadings and Contracts.



LAWMATE Features:

- Creates Table of Authorities Cited
- Multiple Document Indexes
- Word Use and Consistency Analysis
- Concordance Generation
- Document Line Numbering
- Wordstar* Compatible

Legal Aid at an (Almost) Unlawfully Low Price.

Try **LAWMATE** at Your Local Osborne Computer Dealer, or Call Us for the Name of the Nearest Authorized ORTHOCODE Textware Dealer.

ORTHOCODE
The Textware Company

THE ORTHOCODE CORPORATION
P.O. Box 6191
Albany, CA 94706
(415) 753-3222

™ **LAWMATE** is a Trademark of ORTHOCODE CORPORATION
*Wordstar is a Trademark of MicroPro International

ELECTRONIC TYPEWRITER INTERFACE

$395

WILL INTERFACE WITH: IBM, Adler-Royal, Olivetti Praxis, Olympus, Brother, Silverreed, Smith-Corona

FEATURES:

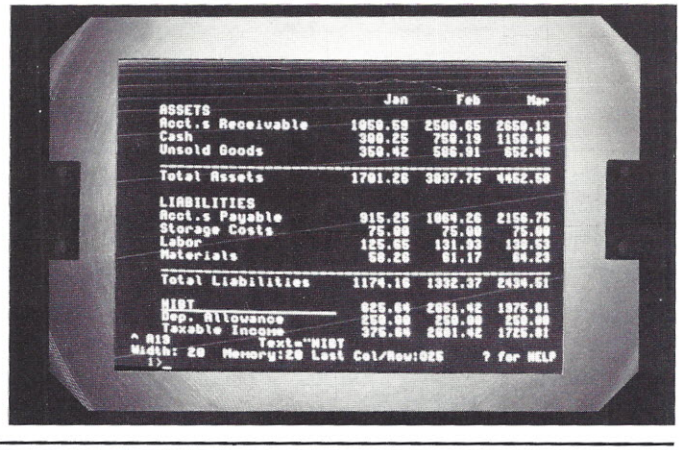
- Z80A 4MHZ CPU control & processing
- 4 or 8K CMOS Battery back-up memory
- 16K EPROM storage for programs
- 2 serial ports
- 300-600 baud auto-answer/auto-dial modem
- Interface for micro or standard cassette recorders for mass storage

Dealer inquiries invited.
Quantity discounts available.

Write or Call
WHOLESALESUPPLIERS
P.O. Box 22428
Carmel, CA. 93922
(408) 373-0320

Sight for Sore Eyes

EASY READER, a screen magnifying lens which adapts in minutes to the Osborne 1™ computer. The five inch monitor is magnified by a 6¾ × 4½ inch durable plastic fresnel lens. To insure portability, the lens can be detached from its mounting bracket, folded flat and laid between the keyboard & screen portion of the computer.



$34.00 each*
Money back guarantee

TO ORDER

Yes please send me ____ **EASY READER** Screen at $34.00 each.

☐ Personal Check ☐ Cashier's Check/Money Order
☐ Visa ☐ Master Charge (Bank No. _____)

Acct. No. _____ Exp. Date _____

Signature _____

PRINT NAME _____

Address _____

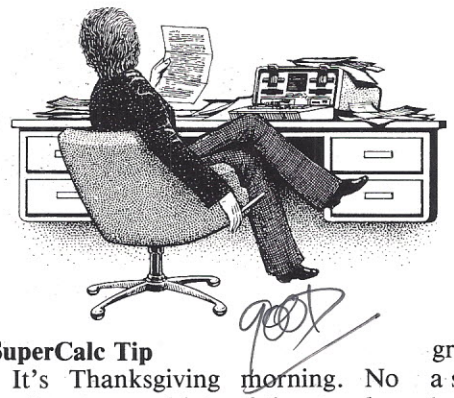
City _____ State _____ Zip _____

*California residents add 6% for state sales tax.
Price includes shipment anywhere in the U.S.A.

dp

Dipco ATTN: Jim Randono
1900 East 12th Street
Oakland, California 94606

Letters



SuperCalc Tip

It's Thanksgiving morning. No work today, and lots of time to play with the new Osborne; dedicated uninterrupted time. So what should I do? The IRS is going to insist on some justification for the deduction, so why not set up a *SuperCalc* template for income and expenses?

Figure out the *SuperCalc* template, and enter the data. An hour's worth of work suggests saving what's been done, so "/SAVE,B:TAX-DATA<RETURN>." Three microseconds after "RETURN", I realize that there's no diskette in drive B. Contemplate the empty drive spinning, the glow of the drive light, wait for the dreaded "BDOS ERR ON B: BAD SECTOR". What do I do to recover? Maybe putting a data diskette in B and hitting RETURN will do the trick. A fool's wish. "BDOS ERR ON B: R/O."

Finally a stroke of inspiration. Perhaps ESCAPE will help. The good program designers at Sorcim gave me a beautiful message: An error occurred on the previous disk operation. But I'm back in the program, the data's still there, and I can now save it correctly. My time isn't wasted after all.

My background is operating and compiling system software on large mainframes. I'm not used to programs that let me recover from stupid mistakes with little effort. Congratulations to Sorcim for developing a superior product and to Adam Osborne for selecting and supplying that software with the hardware he gives away.

Tom Briggum
Virginia Beach, VA

Mad Comics

Your magazine is a delight—a great mixture of advanced and down to earth articles. Can't wait for it to be monthly.

The first two issues really set the tone, with their provocative covers, emphasizing the Osborne's portability and uniqueness. Now comes the October tacky Mad Comics cover. My family turns the magazine upside down if I leave it around. Even my niece says YUK when she see it! Please go back to the classy covers.

Sally Van Natta
Santa Barbara, Calif.

Seeing is Believing

You have a great magazine; I enjoy it even though I ended up buying an S-100 CP/M system. The reason I didn't buy an Osborne is the 52 character display. Although it's true there's nothing sacred about 80 characters, let's face it, 52 is just too narrow for word processing. Although Thom Hogan recommended an 80 character terminal in the CP/M User's Guide, claiming that 64 aren't really enough, I would have been satisfied with that.

READY-TO-RUN

OSBORNE & ASSOCIATES

ACCOUNTING PACKAGE

What's so unique about our accounting package? It works.

When you run this Osborne & Associates Accounting Package on your Osborne 1*, it won't need any changes or modifications. It is specifically modified for the Osborne 1. When we say it's ready to run, it's ready to run.

Don't be fooled by less expensive packages that "work" on the Osborne. They don't. They all require changes and modifications. All you need to do with our accounting package is use it.

Our complete package includes General Ledger. Accounts Receivable, Accounts Payable, and Payroll with Job Costing, and sells for $600. (Specify single or double density.) It's unique—it works.

To order, send your check to:

DATAFLOW
1200 S. MILITARY HIGHWAY
P.O. BOX 13205
CHESAPEAKE, VIRGINIA 23325
(804) 424-1656

*Osborne 1 is a trademark of Osborne Computer Corp.

You Thumbed Through the Manual. Now Read *the* book

In 14 accelerated steps, *WordStar™ Made Easy* lets you build word processing skills which are applicable to any business office. Legal documents, sales reports, business letters, manuscripts—all can be generated quickly and easily without reference to complicated manuals. Applies to any version of WordStar,™ including version 3.0.

An appendix listing CP/M® commands and a detachable WordStar™ Command Sheet are featured for handy reference. Spiral bound paper, 125 pages, $7.95.

Osborne/McGraw-Hill
630 Bancroft Way,
Berkeley, CA 94710

Call Toll Free: 800-227-2895
in California (415) 548-2805
Dept.4

☐ WordStar Made Easy $11.95

Name_____

Address_____

City/State/Zip_____

Plus: ☐ .75/item 4th class ☐ $1.50/item UPS ☐ $2.50/item Air Mail ☐ $10.00/item Overseas
(California residents add applicable tax.)

Total amount enclosed $_____
or charge my ☐ Visa ☐ Mastercharge

Card # _____

Expiration Date_____

Authorized Signature_____

Letters

One of the big advantages of *WordStar* is "what you see is what you get"; you shouldn't have to give up that advantage just to make your text fit on a too-small screen. The alternative, actually maintaining a text line of 65 or 70 characters, requires continued back and forth scrolling; sure the Osborne will do it, but you'll go cross-eyed reviewing anything longer than a couple of paragraphs. It's too bad that it's taken so long to implement a wider screen, although KayComp seemed to readily manage it. Now that it's finally coming, perhaps the controversy will end when people can actually see what they've been missing.

Jack Ludwick
Arlington, VA

P.S.

A few comments regarding my "Two And A Half Utilities For dBase II" as published in the October-November issue of *The Portable Companion:*

1. New *dBase II* users should understand an important effect of the "It" programs. It is very desireable to maintain specific project related programs and data on the B diskette—not the disk containing the *dBase* operating system. This is made simple by typing "Set Default To B." Both of the "It" programs automatically change disk default.

Once the default is set to B, all of your CMD, FMT, and DBF files will be read from and written to the B diskette.

2. These programs are created using the "Modify Command." The first of these programs should be named A:IT, the second, A:ITT, and the third A:SWITCH. After each program is entered, type Control W to get back to the dBase monitor.

3. The second set-up program, (which should be labeled "ITT", not "IT") deserves some description. I have found that on a given day I am frequently switching between *dBase, WordStar,* etc. When I enter *dBase* for the first time on a given day I type "Do IT" and correct the date. On subsequent entries into *dBase,* I type "Do ITT", the correct date is already installed, and I am delivered directly to my B diskette.

4. The "Switch" program is designed to be on the A diskette.

5. The user should rename *dBase*, Com to Do.Com as suggested in the Ashton-Tate manual.

These additional comments should make these utilities more useful to your readers.

Willis Grant
Encino, CA

Take my wife

I am delighted with my most recent investment. I recently sold my Apple to purchase an Osborne. The portability was a major factor—my wife is not overly pleased with the idea of me setting up a computer in the house. Now, when I sense she is tiring of my activities I simply pack it up. Also, I anticipate using it in my work.

I am Senior Vice President and Comptroller of Bank South Corporation (a $7.5 billion bank holding company in Atlanta). Just last week, I convinced the CEO to give me $75,000 "seed" money to begin bringing in personal computers. Osborne is at the top of the list.

I was delighted to receive my first *"The Portable Companion."* It is excellent. I have one complaint—can I possibly receive #1. My free copy was #2. Also I would like to bring a discrepancy to your attention. The subscription cards indicate that the subscription rate is $12.50 (a 30% savings), however, the circulation disclosure on page 4 (August/September) clearly indicates that "Subscriptions are $9.50 for six issues." Whoops!

Thanks for providing me a way of enjoying my hobby and still keep my wife!

Jeff Warlick
Atlanta, GA

We are sorry to report that we have

Now our $29.95 complete Pascal for CP/M is an even better bargain...

WHAT THEY SAID ABOUT JRT PASCAL 2.0:

CREATIVE COMPUTING, Nov. '82 "...While 'there is no such thing as a free lunch,' JRT Pascal at $29.95 (which includes postage) certainly allows the user to experience champagne and caviar at cafeteria prices..."

INTERFACE AGE, Oct. '82 "...JRT Pascal is following the example set by Software Toolworks (Sherman Oaks, CA) of offering quality software at extremely low price..."

INFOWORLD, Aug. 16, '82 The magazine's 'Software Report Card' rated JRT's documentation 'good' and performance, ease of use and error handling 'excellent' – the highest rating.

AND NOW: JRT PASCAL 3.0—

with all the features that earned 2.0 so much praise—PLUS the many new features shown here. The price?—**still just $29.95!** This astonishing price includes the complete JRT Pascal system on diskettes and the new expanded user manual. Not a subset, it's a complete Pascal for CP/M.*

Faster and more reliable than ever, for beginner or expert, engineer or businessman, JRT Pascal 3.0 provides a set of features unequaled by any other Pascal... or any other language.

OUR NO-RISK OFFER:

When you receive JRT Pascal 3.0, look it over, check it out, compare it with similar systems costing ten times as much. If you're not completely satisfied, return it—with the sealed diskettes unopened—within 30 days, and your money will be refunded in full. That's right: *satisfaction guaranteed or your money back!*

A JRT bonus: if you want to copy the diskettes or manual—so long as it's not for resale—that's o.k. with us. Pass it on to your friends. But don't delay. Send the coupon or phone today and start enjoying the Pascal advantage; *at $29.95, there's no reason to wait!*

announcing new JRT Pascal 3.0...

NEW Full support for indexed files

NEW CRT screen formatting and full cursor control

NEW Facilities for formatting printed reports

Graphing procedures

Statistic procedures

14 digit BCD FLOATING POINT arithmetic

True dynamic storage

Advanced assembly interface

NEW File variables and GET/PUT

NEW Dynamic arrays

Random files to 8 megabytes with variable length records

64K dynamic strings

Activity analyzer prints program use histogram

No limits on procedure size, nesting or recursion

More than 200 verbal error messages

Maximum program size: more than 200,000 lines

Separate compilation of auto-loading external procedures

Extended CASE statement

Fast one-step compiler; no link needed

Efficient compiler needs only 85K diskette space

NEW Handy JRT Pascal reference card

NEW 175-page user manual with protective 3-ring binder and 5-1/4" or 8" diskettes

NEW SEARCH procedure for fast table look-up

...still only $29.95!

JRT/PASCAL 3.0

Send to **JRT SYSTEMS**
550 Irving Street/D1
San Francisco, CA 94122

or phone **415/566-5100**

Here's my $29.95; please send me JRT Pascal. I understand that if I'm not completely satisfied, I can return it within 30 days—with the sealed diskettes unopened—for a full refund. (Allow 2-3 weeks for shipping.)

I need the 5-1/4" diskettes for ☐ Apple CP/M; ☐ Heath, Hard Sector; ☐ Heath, Soft Sector; ☐ Northstar; ☐ Osborne; ☐ Superbrain; ☐ Televideo; ☐ Xerox 820. **I need ☐ 8" SSSD diskettes.**

Name _____

Address _____

City _____ State _____ Zip _____

☐ Check ☐ C.O.D. ☐ MasterCard ☐ VISA

(CA residents add sales tax. Add $6 for shipping outside North America.)

Card # _____ Exp. _____

Signature _____

*CP/M is a Digital Research TM. A 56K CP/M system is required.

10 reasons why you should call DataSource® for hardware.

1. Competitive Prices Our volume enables us to offer you prices which are consistently competitive. Compare for yourself, then call us toll-free 800-328-2260.

2. Express Service: 7 days per week, 24 hours per day You can place orders any day of the week at any hour of the day or night. Your order will be processed and shipped within 24 hours for all products in stock.

3. Discount Structures We offer significant discounts to any individual, organization or user's group purchasing in quantity.

4. Key Account Program For corporations and institutions, we offer a comprehensive program: volume discounts, complete maintenance packages with an on-site option, specially staffed technical support, tailored training programs and creative financing options.

5. Unconditional Money-Back Guarantee We stand behind everything we sell. If you are not completely satisfied with your purchase, return the item within 60 days and receive a full refund.

6. Toll-Free Technical Support We service what we sell. Our customers have direct access to our technical staff on a toll-free basis. **800-328-2260.**

7. National Maintenance Network We offer a variety of maintenance agreements for hardware products. Call for more information.

8. Flexible Payment Options We accept all major credit cards, checks and money orders, as well as purchase orders from corporate accounts.

9. State-of-the-Art Software and Hardware We carry a broad range of what we believe to be the best in software plus carefully selected hardware products and accessories.

10. The Personal Touch Computers may not be human, but we are. Whenever you need answers, help or advice, we're as close as your phone. Call toll-free 800-328-2260 (in Minnesota, 612-544-3615).

Here's a small sampling of hardware available now from DataSource.®
(If you don't see what you need, just call us at the number below.)

Smith-Corona TP-1	$689	Hayes Smart Modem 300	$230
C.Itoh Pro Writer	$515	Hayes Smart Modem 300/1200	Call for price
C.Itoh Pro Writer-Serial	$650	Cable	$ 40

Please include 3% for shipping and handling. Minnesota residents, add 5% sales tax. Prices subject to change without notice.

FOR MORE INFORMATION CALL TOLL-FREE

1-800-328-2260

IN MINNESOTA, CALL 612-544-3615

DATASOURCE® systems Corp.

Your source for micro software and hardware

American Express
MasterCard
Visa

DataSource Systems® Corporation, Dept. GB, 1660 So. Highway 100, Minneapolis, MN 55416

Letters

sold out of the premiere issue of The Portable Companion *(June/July) and cannot send any more copies out. Our early owners should also be aware that the cut off date for receiving a complimentary copy of the magazine is February 28. If you have not received your complimentary copy (as of September each new owner receives one packed with the machine) be sure to notify us before that date (and include your serial number).*

With regard to the mistake in the circulation disclosure pointed out by Mr. Warlick, this was an error. The actual subscription rate was $12.50; the rate is now $25 for 12 issues. We apologize for any confusion caused by the discrepancy.

In Rebuttal

The December/January issue of *The Portable Companion* contains a letter-to-the-editor on the subject of WRITE TRACK, a manuscript tracking system offered for sale by Gradan Consulting Company of Thousand Oaks, California. The letter was written by a Mr. Adam Thomson of Fayetteville, North Carolina, and presents an unfair, negative, image of my product.

In September 1982 I received a handwritten letter from Mr. Thomson in which he stated that he had a check already made out to Gradan Consulting Company but it was "posted on [my] wall" and would remain there until Gradan proved itself worthy of its receipt. He indicated that before sending off his check for $100, he decided to investigate my company. His method was to use the telephone. Gradan Consulting Company is not listed in the telephone directory and he, therefore, concluded that it was a sham. His letter was distinctly unfriendly and even threatening (e.g., '. . . I warn ya [sic], I can be pretty nasty when I smell something fishy. I have reported this to the Osborne folks.")

I responded immediately with a letter written in a tone which demonstrated by mixed feelings: I was pleased that he was interested in my product but dismayed at being judged guilty of fraud without being given a chance to prove otherwise. As I explained to Mr. Thompson, Gradan Consulting Company is a freelance business. It is not listed in the telephone directory because the telephone company charges exorbitant rates for such listings. I am listed personally, though.

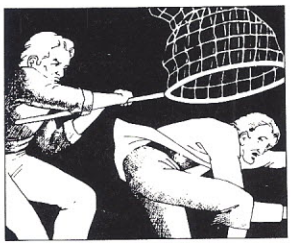
I offered Mr. Thompson this explanation, included a business card with my home telephone number on it (advising him that it would be hooked up to an answering machine during the normal work day), and suggested that he purchase the user manual for $10. He could later apply that amount to the software purchase, if he decided it satisfied his needs.

The point of this letter is to assure your readers that Gradan Consulting Company is a legitimate, honest business. I respond to all inquiries as soon as possible and am not offering a phony, useless product for sale. WRITE TRACK is, to my knowledge, the only manuscript tracking system on the market: and since the Osborne 1 is a writer's dream machine, this software package can only enhance it. I do not expect, nor even want, to sell WRITE TRACK to someone who has not at least requested more information about it than could possibly appear in any magazine's new products announcement column. I encourage potential customers to purchase the user manual first.

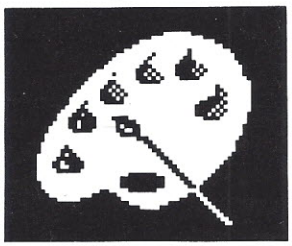
Incidentally, WRITE TRACK will be reviewed in a forthcoming issue of *Infoworld*.

Thank you for publishing this response. If anyone would like any information about WRITE TRACK, I would be happy to answer their questions.

Marilyn Gratton
Gradan Consulting Co.
Thousand Oaks, CA



TRAPPER — You've seen this game on video sets. Try and box in your opponent without running into anything yourself. Ours has some interesting variations. You are represented on the screen by your initial, and there are two speeds used in the game.



ARTIST — A program which explores the Osborne graphics. We developed this program to draw some of our own screens. You can draw, edit, and save screens 52 or 128 characters wide, recall them, and work on them more. The storage format is easy to call into other programs so you can access your screens in an application program. This program also has a hypnotic feature of computer generated art. The computer will draw a screen, let you look at it a moment, then draw another.

ACID RAIN — Whether you are catching bombs, eggs, or raindrops, "Catch" games can fascinate for hours. The rain is coming down harder all the time, and we have to neutralize it before it hits the ground.

Starbase Omega	**$25.00**
Valor	**$21.95**
Catacomb	**$19.95**
Artist	**$21.95**
Trapper	**$17.95**
Acid Rain	**$17.95**

Add $2 per order P&H. PA residents add 6%. Send check or Visa/MC info or call. COD okay.

PORTABLE SOFTWARE

216 Penn Avenue
Oxford, PA 19363
(215) 932-4247

Dealer inquiries invited.
Programmers! Let us market your creations! Write.

if you use **CP/M®**
then you need
DISK FIX!

DISK FIX is a disk editor which can display, edit or copy any sector of a CP/M floppy and/or hard disk. The DISK FIX utility can be used to recover files from disks with damaged directories, to reconstruct files with bad sectors, to restore erased files and to do general disk editing.

DISK FIX automatically configures to floppy and hard disks, just insert the program disk and it is ready to run.

PROGRAM MAP for Microsoft BASIC

PROGRAM MAP produces alphabetical lists of a program's variables, commands & functions, line numbers referenced and constants. It is fast and easy to use and runs directly under CP/M.

PROGRAM MAP helps you accurately 'debug', modify, convert and/or document Microsoft BASIC programs in a minimum amount of time.

telecommunications? use SOFTCOM®

SOFTCOM is a smart terminal and file transfer utility all in one easy to use package. SOFTCOM can:

- make your system a terminal to a HOST time sharing system.
- capture data onto your disk from a HOST time sharing system.
- send text and program files from your disk to almost any type of computer.
- exchange any type of file with another SOFTCOM system with error detection and automatic retry.

SOFTCOM runs on all CP/M based computers. Three license options are available: single CPU ($150), dual CPU ($250) and multi CPU ($450). Call our software HOT LINE 906/228-7622.

The Software Store

706 Chippewa Square
Marquette MI 49855

the Wizard of Osborne

Two wizards are better than one

Thom Hogan and Brad Baldwin

With this issue I'd like to introduce a new Wizard, Brad Baldwin. Brad joined the staff of the magazine in October. Prior to that, he was OCC's technical support correspondent and the person responsible for all the printer interfacing notes we've sent to our dealers.

Brad takes over most of the technical questions that you send in. I'll continue handling the more oblique questions, those concerning Osborne policy, trends, or questions relating to broader marketing issues, such as competition.

Q: I'm a ComputerLand Dealer, and I have received numerous complaints about the *Mailman* software package. It seems to be both poorly designed (user-nasty) and filled with bugs; some customers have asked for refunds. The most serious problem is where files become non-usable by *Mailman*, indicated usually with a message that reads: "BAD INDEXED FILE," "FILE NOT OPEN," or "FATAL SYNTAX ERROR, STACK OVERFLOW." Naturally, entering data for several hours then not being allowed access to it would upset anyone. What's going on?

A: *Mailman* is not preventing an operator from overwriting a needed existing file, or writing to files that it simultaneously draws data from—dangerous practices in either instance. We'll try to explain.

After editing/creating a mailing list file, the next step is to "select out" the list for printing. The screen prompts the user for a new file name, and here the problem begins. If the operator inadvertently uses the same name as the mailing list file, a host of different and difficult to document problems arise. Apparently, *Mailman* starts writing to a file it is concurrently drawing data from—a no-no. Whatever the reason, *Mailman* should have included a warning message that informed the operator that the file name already existed, and to choose a different name.

We have run into a few other problems with *Mailman:*
1) There is no way to conveniently stop the printer once it starts printing. Pressing the RESET button is all you can do; *Mailman* then needs to be rebooted. 2) The State field converts lower case into upper case characters (a nice touch), but they forgot to do the same with the Middle Initial field. 3) There is no distinction between "create" and "edit." After filling in the Name and Zip Code fields (and in that annoying order), *Mailman* searches for that record as if an edit were being performed. However, it does this procedure even if the list is being entered for the first time and there is nothing to edit. So, every record entered causes a disk access search, slowing the operator down.

These and other complaints are being examined by Standard Microsystems, the creator of *Mailman* and by Osborne's Software Acquisitions department. The solution will probably be in the form of a new version upgrade.

Q. What happened to Microstat?

A: The versions of Microstat we were provided by the author never met our standards for software, therefore we decided not to market the package. We are currently looking for a replacement for this program.

Q. What does Osborne do for user groups? Do you provide them with anything that isn't available elsewhere?

A: Originally, Adam wanted to maintain a complete separation between the company and user groups. It was his feeling that user groups provide the objectivity that keeps a company on its toes and he didn't want Osborne doing anything for the user groups that might compromise that arrangement.

This past October it was decided that Osborne should have a more formal relationship with the user groups, one in which information can be exchanged in both directions, without compromising the user group's objectivity. To that end, a user group coordinator, Esther Massie, was appointed. As this is being written, she has begun the process of contacting each known user group and finding out their needs and desires vis-a-vis Osborne.

All communication to Osborne from user groups should be channeled through Esther. As before, Adam, myself, and others in the company are available on occasion to speak before user groups; such scheduling should now be arranged through Esther.

Q. Sometimes when I use *WordStar* with *MailMerge*, the first page prints out correctly but all pages after that have the dot command printed out on the first line. In a different situation, sometimes I get blank or incomplete pages printed out after the first page was correct. Why?

A: This problem is very common; you have inadvertently inserted spaces after the .PA command and last carriage return in your file. In other words, this is what your file looks like (<cr> represents carriage return, <sp> is a space, and <_> is the cursor location):

.PA <cr>
_____(page break line)
<sp> <sp> <sp> <_>

It also could look like this:

.PA <cr>
_____
<cr>
<cr>
<cr>
<cr>
<sp> <sp> <sp> <_>

This is what your file SHOULD look like:

.PA <cr>
_____
<_>

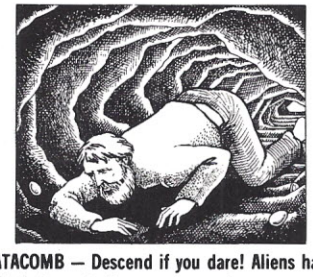
Type a ^QC to move to the end of the file. If the cursor is not located immediately below the dot in the .PA command, then type ^ hyphen to erase the trailing spaces and carriage returns up to the proper location.

The reason the dot commands are printed rather than interpreted is that *MailMerge* does not recognize the end of a line until a carriage return is reached. *WordStar* wraps around to the first line of the document (which happens to be your dot command) to look for a carriage return. The dot command is not recognized as starting in the first character position because of the embedded spaces, and is consequently printed as text.

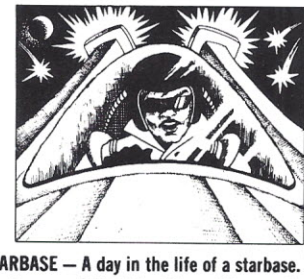
Blank or incomplete pages are printed because of the same embedded carriage returns/spaces problem except that now your file DOES end with a carriage return. The fix is the same in either case.

You Can Mix Business with Pleasure

VALOR – An arcade game with constant mapping. You'll never play the word type again. You are in an infinitely tall tower, working your way up. High score stored, progressive difficulty. $20.



CATACOMB – Descend if you dare! Aliens have left their nest. You are to capture eggs and elixers without being destroyed by their defenses. $18.



STARBASE – A day in the life of a starbase. You must successfully defend from Klingon attacks, navigate through an asteroid field, and dock safely at the starbase. Fast action! Top five scores stored. Great graphics! $25.

* All programs in fast machine language.
* All programs use Osborne graphics.
* All programs written for the Osborne.
*All documentation on disk – nothing to lose.

Add $2 per order P&H. PA residents add 6%.
Send check or VISA/MC info or call. COD OK.

Portable Software
216 Penn Avenue
Oxford, PA 19363

(215) 932-4247

Dealers inquiries invited.
Programmers! Let us market your creation!
Write.

the Wizard of Osborne

Q. Why is it that I get periodic "File Not Loadable" error messages with *SuperCalc?* This problem is quite infuriating. Sometimes I spend many hours building a spreadsheet, with periodic saves to disk, only to discover later that the file is "not loadable."I've tried everything to call the file back up—but always to no avail; however, the file is still listed on the directory.

A: We suspect that when the file was saved, the diskette became full. *SuperCalc,* however, had already erased the original file to make room for the new one. The directory listing is not erased.

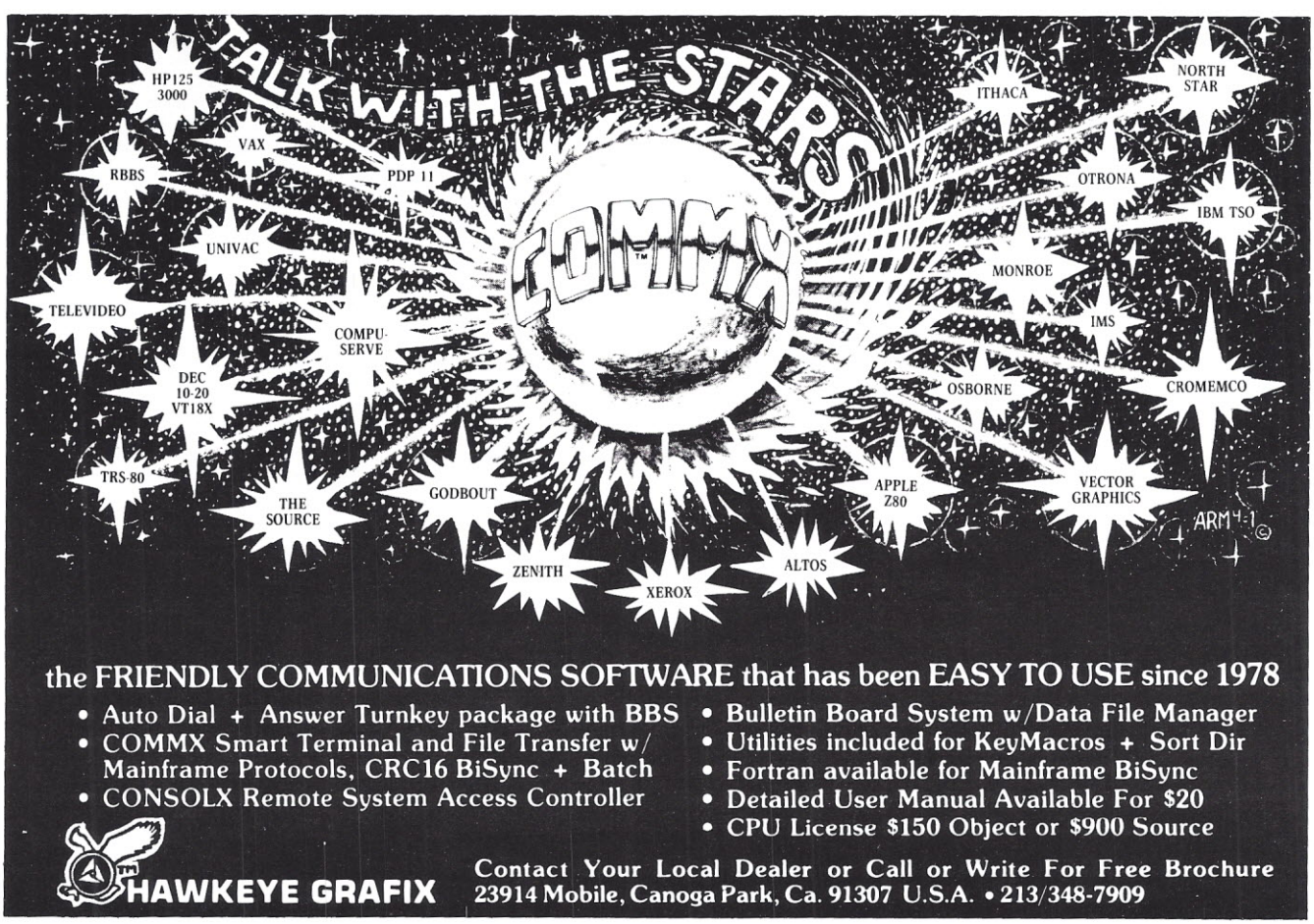
As this is a serious problem, let's go through the complete scenario:

A spreadsheet has been created and saved. You now wish to extend or add information to the spreadsheet, so you call it back up, make your changes, and then type in the save commands. *SuperCalc* will prompt you that the filename already exists and do you want to overwrite? Invariably, the response from the *SuperCalc* user will be "yes."

SuperCalc erases the sector header (removing the old file from the diskette) and proceeds to write the new file over it. If there is enough room on the diskette, the spreadsheet is saved. However, if your new spreadsheet exceeds the diskette capacity, it is not saved and the "disk full" message appears. Unfortunately, the original file has already been erased—a tactical error Sorcim is working on. Attempting to load the file produces the "File Not Loadable" message.

If this ever happens again, and your spreadsheet is still on the screen, simply place another diskette in the "B" drive and save to it. LET THE DISK FULL MESSAGE BE YOUR WARNING! When that pops up, and you just attempted to overwrite a file, be advised that the file was erased off of the diskette.

There are two ways to prevent this from happening. 1) Keep track of your disk space! Periodically run XDIR on the file diskette. 2) Do not overwrite a file if you think the diskette is getting full. Instead, choose another file name. If the diskette is indeed full, the original file is not erased.



the FRIENDLY COMMUNICATIONS SOFTWARE that has been EASY TO USE since 1978

- Auto Dial + Answer Turnkey package with BBS
- COMMX Smart Terminal and File Transfer w/ Mainframe Protocols, CRC16 BiSync + Batch
- CONSOLX Remote System Access Controller
- Bulletin Board System w/Data File Manager
- Utilities included for KeyMacros + Sort Dir
- Fortran available for Mainframe BiSync
- Detailed User Manual Available For $20
- CPU License $150 Object or $900 Source

HAWKEYE GRAFIX

Contact Your Local Dealer or Call or Write For Free Brochure
23914 Mobile, Canoga Park, Ca. 91307 U.S.A. • 213/348-7909

AT LAST AN AFFORDABLE 10 MEGABYTE WINCHESTER FOR THE AFFORDABLE OSBORNE 1™ (OR OTHER Z-80 SYSTEMS)

MD-10 10 MEGABYTE (FORMATTED) 5 1/4" HARD DISK

$2295

AFFORDABLE 20 AND 44 MEGABYTE WINCHESTERS ALSO AVAILABLE

For this unbelievable price your winchester will be delivered completely assembled and tested, with drive controller, case, power supply, cabling, Z-80 interface and the best disk controller software on the market.

* The MD-10 allows you to retain your OSBORNE's portability. You simply unplug the winchester and the OSBORNE works exactly as before.
* The unique and simple interfacing system does not tie up existing OSBORNE ports.
* Significantly faster than other winchester subsystems which interface through the IEEE-488 port.
* CP/M drivers require minimum memory overhead (less than 2k). Other systems require as much as 6K.
* The MD-10 can read or write a 64k file in less than four (4) seconds.
* Both software and hardware installation is quick and simple.
* A network system is available which can support up to sixteen (16) OSBORNEs from one MD-10 or larger disk subsystem.
* Up to eight (8) 44 megabyte disk subsystems can be interfaced to one OSBORNE.
* Software supports 36 different user areas per MD-10.
* Backing up hard disk files is simple with the special software which is provided with all MD-10 subsystems.
* With a single hard disk installation, the MD-10 subsystem becomes units A and B with the standard drives being designated E and F. If a second MD-10 is installed later it becomes units C and D.
* MD-10 or larger systems will interface with any Z-80 computer (CCS, APPLE(CP/M), ZENITH/HEATH, NORTHSTAR, GODBOUT, XEROX 820, Z-80/S100, ALSPA, or TRS-80 MOD II) using CP/M, OASIS or other system.

FULL SIX-MONTH WARRANTY EXTENDIBLE TO A YEAR!

MEGA-BYTE

TO ORDER OR FOR MORE INFORMATION:
(801) 257-7033 or mail to MEGA-BYTE INC.
RT. 3 Box 35, Tremonton, Utah 84337
TERMS: Cashiers Check, VISA, M/C or COD.
Shipping charges added to all orders.

NAME _____ TITLE _____
COMPANY _____ CITY _____
ADDRESS _____ ZIP _____
STATE _____
TEL _____

CP/M is a registered trademark of Digital Research; OASIS is a proprietary product of Phase One Systems, Inc.; Z-80 is a trademark of Zilog; MD-10 is a registered trademark of Media Distributing.

FOX & GELLER
gives dBASE II™ users 10 good reasons why they need
QUICKCODE™
The dBASE II™ Program Generator

Reason #1
Save Time.
Quickcode saves you time, because it can write complete dBase II applications programs in minutes.

Reason #2
Ease of Use.
Quickcode requires *no programming* or computer knowledge. If you can type, then you can create a customer or inventory database *in 5 minutes.*

Reason #3
dSCAN.™
The unique dSCAN feature lets you *select records based on your own requirements* (e.g. STATE = 'NJ' or AGE > 30). Then you can print them in a variety of formats (or transfer them to Wordstar™ for form letters.

Reason #4
Wordstar.™
If you want to create form letters using your data, Quickcode can transfer any part of your database to Wordstar.™

Reason #5
Mailing Labels.
Want to print mailing labels? With Quickcode, you can get them in *one up* or *four up* format. You can print labels of almost any size or shape you can imagine. For any part of your database (e.g. ZIP CODE = 90023)

Reason #6
Reports.
Quickcode can create an amazing variety of reports and forms. You can even produce reports up to 132 columns by 96 lines per page.

Reason #7
Power.
Quickcode can set up retrieval keys using as many as 10 data fields. You can use these keys to get any record from your database in about 2 seconds. Data entry is also a snap. You can have any data field automatically set to a default valve or checked in one of three ways: range checking, match list checking, or file lookup.

Reason #8
Capability.
Now, you can use *four new data types* not found in dBASE II itself: date, money, telephone, and social security. Just what you need to simplify your work.

Reason #9
Menus.
Want to set up a more powerful application? Use the Quickcode menu generator to create a menu system.

Reason #10
Fox & Geller.
Perhaps the most important reason to buy Quickcode. We've built a reputation for quality products that *keep improving.* Like dGRAPH (the dBase II graphics system) and our dUTIL utility.

Fox & Geller's Quickcode: $295.00

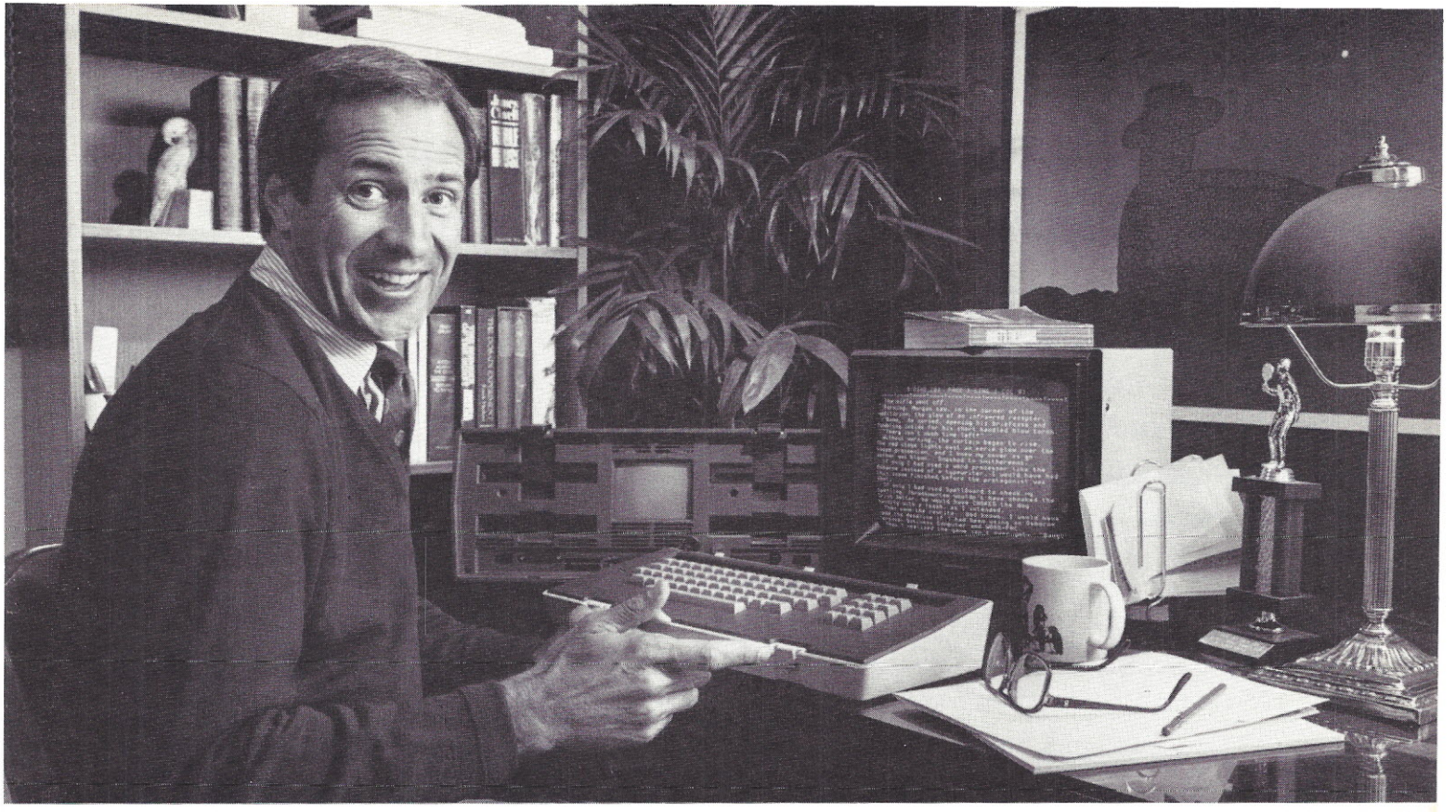
We intend to earn your loyalty by offering software that's the best.

For further information or to see Quickcode in action, see your local dealer or call (201) 837-0442.

FOX&GELLER

Quickcode and dSCAN are trademarks of Fox & Geller, Inc.
dBASE II is a trademark of Ashton-Tate.
Wordstar is a trademark of MicroPro International

Fox & Geller, Inc.
P.O. Box 1053
Teaneck, NJ 07666
201 837-0142



Writers! We've taken the paperwork out of writing. The Osborne™ Personal Business Computer. And WORD·PAC.™

Author Peter DeVries once said, "I love writing. It's the paperwork I can't stand."

The Osborne Personal Business Computer is an outstanding writer's system, because it automates the paperwork of writing. Quickly and easily.

Only $1795 delivers a complete computer including WORDSTAR® software for extensive word processing. The portable Osborne system fits the work style of writers (you can take it wherever you want), yet the system compares with dedicated word processors costing several times more.

Communications options connect you to a variety of information banks, for research or brainstorming, or for shipping documents electronically, over telephone lines.

And now, the WORD·PAC brings even more efficiency, accuracy, speed and fun to the writer using the Osborne Computer.

Five packages to check your spelling, analyze your grammar, handle footnoting, indexing, and even arithmetic.

Osborne. The best thing for writing since the invention of royalties.

For your nearest dealer, call (in California) 800 772-3545 ext. 905; (outside California) call 800 227-1617 ext. 905.

OSBORNE™
COMPUTER CORPORATION

WORD·PAC SPECIAL. $345 buys you: Spellguard (spelling checker), Grammatik (grammar/style checker), Footnote, Math*, and Documate/Plus (contents/indexer), A $695 value. Only $345.

Trademarks: WORD·PAC: Osborne Computer Corporation • Spellguard: Innovative Software Applications • Grammatik: Aspen Software Company • Math*: Force Two, Limited • Documate/Plus: The Orthocode Corporation.
Registered Trademarks: WORDSTAR: MicroPro International of San Rafael, California • Footnote: Pro/Tem, Inc.

"Sure, we can send you 500 widgets tomorrow, and... with our Trantor hard disk unit we can

- UPDATE OUR STOCK LIST
- PUT YOU ON OUR MAILING LIST
- ISSUE A CONFIRMATION NOTICE
- UPDATE ACCOUNTS RECEIVABLE
- REVISE OUR BALANCE SHEET
- MERGE PRINT A SHIPPING TICKET...

ALL WITHOUT CHANGING DISKETTES!"

The Trantor TSL-5 and TSL-10 hard disk storage units increase the capacity of your Osborne 1* computer many times!

Installation is easy -- unpack your disk, plug it into the IEEE port, run a simple 5 minute installation procedure and you're ready for use!

*Osborne 1 is a trademark of Osborne Computer Company

Comes complete with BIOS, back-up, retreive utilities and cable.

TSL-5 5 MBYTE	$2995	TSL-10 10 MBYTE	$3395

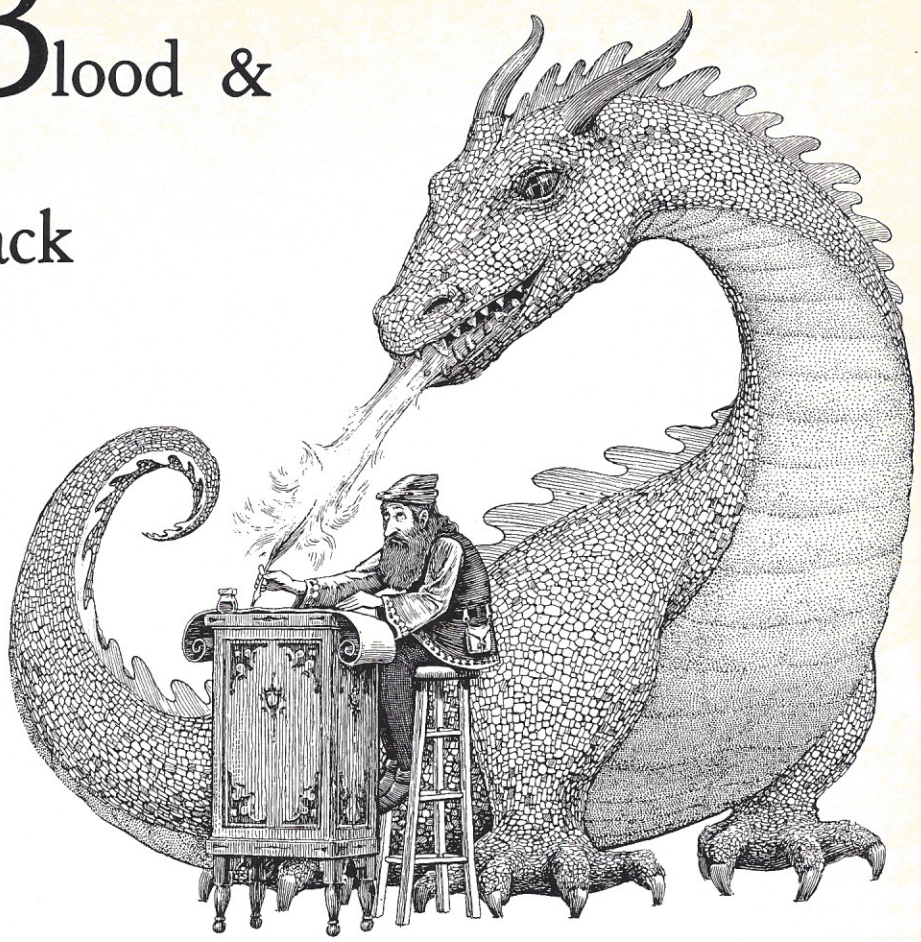
CONTACT YOUR DEALER, OR:

TRANTOR SYSTEMS, LTD.
4432 Enterprise St., Unit I
Fremont, California 94538
(415) 490-3441

TRANTOR

Dragon's Blood & Lampblack

Richard Drakeford



In olden days when ink was brewed from dragon's blood and lampblack and each sheet of paper was handmade from recycled underwear, the monks and magicians thought twice before setting down their thoughts. With the ink on paper technology, the physicial reorganization of expressed thoughts was relatively difficult, so things tended to stay the way they were first put down. To avoid grappling with intractable ink and paper, the emphasis was on the careful organization of thought as a condition precedent to writing down. Revision was thus avoided by taking great care in inscribing thoughts.

Fluent writing in those days was the mark of a genius who was able to organize a sizable body of thought within his mind, prior to putting pen to paper. To more ordinary people who had something to write, the great care required in organizing thought was often constipating in effect.

The typewriter and inexpensive wood-pulp paper made the practice of drafting common—the first rough draft was seldom what turned out to be the final presentation of words to audience. But, revision, though easier, was still difficult and to be avoided as much as possible. Furthermore, collections of notes and drafts and revisions tended to make the author's garret a messy place.

To those who learn computer-assisted text processing, the physical reorganization of words is vastly eased, so much so that the writing process can be a chicken and egg conundrum. One must still think up before writing down; but you need not exhaustively think out. The interaction between brain and inscribed words is often complementary. That is, the physical manipulation of ideas already expressed in tangible physical form can be an aid to the better organization of the mental concepts. This is a new stage in the art of thinking/writing (which is now also writing/ thinking).

The Osborne 1 permits trial physical orderings of thought up material to be done as experiment, and quickly discarded if fruitless. A too-fecund proliferation of burgeoning notes can be quickly weeded out; redundant confusion evaporates in the wink of an eye. Interjections and tardy afterthoughts need not be left behind—insertions go anywhere and easily. A paragraph with a case of fungus or gangrene can be doctored by either the application of salving verbiage or by drastic surgery, as appropriate.

Although the emphasis here is on textual matter and thinking in words, this is not to deny or denigrate other non-linear methods of thinking and notating. As just one example, structure visualization and subsequent notation in diagram or sketch, chart or map have great utility. It's just that the personal computer is not yet fully equipped to deal with such thought and notation.

But the computer does deal admirably with one particular form of ideas: thoughts expressed in the English language and notated as a sequence of words made up of alphabetical characters.

To those who learn to use this new tool, the process of writing takes on a new plasticity. Computer memory and magnetic media marked with bytes are infinitely more malleable than rag paper marked with the red ink called dragon's blood. The computer, by making it vastly easier to physically inscribe words and subsequently change them, has transformed writing/thinking.

Where once the comprehensive mental organization of words was an absolute prerequisite to writing, the physical acts of writing and rewriting words can now be an aid to the process of thinking—easy physical manipulation of textual material organizes thought as well as the other way around.

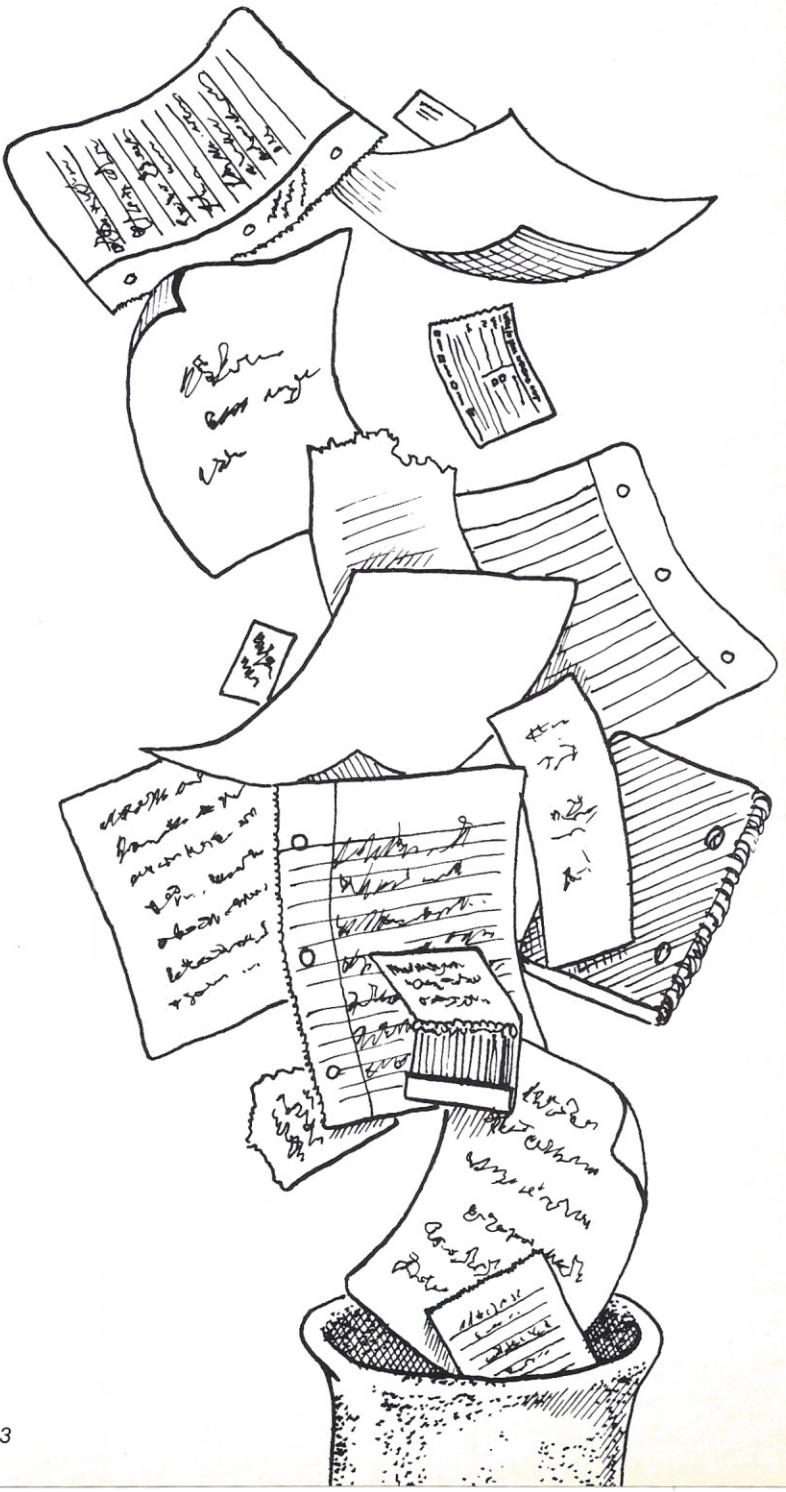
(Richard Drakeford is a retired army officer who lives in the San Francisco East Bay area. He has published fiction under other names in men's magazines. After retiring in 1971, he attended the University of California at Berkeley, obtaining a degree in Rhetoric in 1975 and a law degree in 1978.)

Sorting notes with MailMerge

Richard Drakeford

"...I took some of the papers, and making short hints of the sentiment in each sentence, laid them by a few days, and then, tried to complete the papers again by expressing each hinted sentiment at length...I also sometimes jumbled my collections of hints into confusion, and after some weeks endeavored to reduce them into the best order, before I began to form the full sentences and complete the paper. This was to teach me method in the arrangement of thoughts."

—Benjamin Franklin
in The Autobiography



Benjamin Franklin deliberately jumbled his notes in order to teach himself the art of writing. He recognized that the topical content of a composition is often a separate issue from the problem of sequence or form—"the *arrangement* of thoughts."

Today you can use your Osborne 1 to sort a pageful of jumbled notes into a logical sequence, and it doesn't take a program to do it. Just use the Merge-print command of MailMerge to print a sorted sequence to a new disk file.

Most people find it convenient to take notes higgledy-piggledy, catch-as-catch-can. Prior to a first draft, there must be a collection of raw material about which to write. You can, of course, collect material in your head and have your subconscious sort it out before you write it down in some order—the old fashioned method, but still effective. Or you can let your Osborne 1 assist you in the collection/ordering process, which may be even more effective.

Notes for fiction often come out of your own unbridled imagination. Legal research notes are copied out of case reports and lawbooks. School notes come out of textbooks and other reference books. The point is that it is often more efficient to take notes in a jumble in the order you think them up or the order you come across them. They can be sorted out later.

Your notes on one topic are not made all at the same time. If you are like me you will be learning about a subject little by little. Or you will be thinking up something to write piece by piece, at odd times, over a period of days or weeks. Just open a WordStar Non-document file on a subject and add notes to it when the occasion arises. Use accretion, the way an oyster makes a pearl, to accumulate material.

Someone with varied interests will be working on more than one topic at a time. Just keep separate files for each different subject or major subdivision of a subject on which you are taking notes. One diskette can handle many short files. A student might keep a separate diskette for each class in which he is enrolled, with separate files for lecture notes, gleanings from textbooks, a bibliography, notes from outside reading, and material being collected for a term paper.

Let's take some notes!

In order to facilitate sorting later, you formulate each note as a chunk of data for the computer. In computer lingo, each short note will be the value of a string variable. Use the N command of WordStar to create a data file readable by MailMerge.

Data files readable by MailMerge are a series of ASCII alphanumeric characters delimited into separate items by commas and carriage returns. MailMerge will recognize a variable holding up to 200 characters. That's a pretty long jotted note, equivalent to 35 or 40 words. Even though MailMerge will handle such notes, for human convenience, write notes that are not longer than one line on your printer. My Epson printer will print up to 132 characters on a line in compressed mode, so I limit my notes to 132 columns.

To hold to the strict format required by the computer, each note must end with a carriage return. You will create a data file that the computer sees as a series of records (lines), each consisting of one data variable, a rather long string of ASCII alphabetical characters. In a Merge-print data file, the carriage returns are used as record delimiters.

All those short, punchy lines can be combined and lengthened and fleshed out later. It is later, after sorting, that you handle your material as text—not data.

You must avoid using commas in your notes. MailMerge data files use

Most people . . . take notes higgledy-piggledy, catch as-catch-can.

After thinking up or copying down one line notes, you will want to sort them into logical order.

```
PIP LST:=GOOSEY.NTS
Wasn't that a dainty dish
And in mylady's chamber;
Whither shall I wander?
I took him by the left leg
Upstairs and downstairs,
Goosey goosey gander,
Who wouldn't say his prayers;
All the king's horses and all the
   king's men
And threw him down the stairs.
There I met an old man
Jack fell down and broke his crown
```

Figure 1

```
xWasn't that a dainty dish
dAnd in my lady's chamber;
bWhither shall I wander?
gI took him by the left leg
cUpstairs and downstairs,
aGoosey goosey gander,
fWho wouldn't say his prayers;
yAll the king's horses and all the
      king's men
hAnd threw him down the stairs.
eThere I met an old man
zJack fell down and broke his crown
```

Figure 2

commas as well as carriage returns as data delimiters. If there is a comma in your note, the scanner will read it as two variables rather than one. You can put quotes around the string to get around this.

Also, you cannot use the word-wrap function when entering notes that will be manipulated as data. Word-wrap abides by margin settings and puts in unwanted carriage returns, which would be erroneously read as data delimiters.

At some point after thinking up or copying down one line notes you will want to sort them out into a logical order. Maybe it is time to write the article. Maybe you need to prepare a master outline to study for a final exam. Whatever.

Prior to sorting you must mechanically edit your notes to make sure they are formatted to be handled as data. Mainly, make sure they contain no commas. Find all inadvertent commas and delete them by replacing with nulls. Use the rapid ^ QA global replace operation of WordStar's edit facilities.

Next, exit your file and print it to paper. That means you print it in its present state of jumbled disorder, I find it convenient to use the CP/M PIP command to list the file on fan-fold paper. Successful printing by PIP command verifies that the file is in strict ASCII format as required for data files. Using PIP also avoids default page formatting. See Figure 1 for an example of notes in the kind of jumbled confusion Benjamin Franklin would have liked.

Now look at your raw notes and start to order them mentally. Assign names to your notes in pencil along the margin. The variable names you assign now are the sequence in which the notes will be read. But there's the trick: the notes will be Merge-printed out in a different sequence, a sequence that you specify by reference to the variable names.

Variable names should start with a letter; otherwise you have great freedom. MailMerge will spit out the notes in any sequence you specify, but it is wise to pick names that are indicative of the desired order. Think of notes as "point a...point b... point c" as you decide on their arrangement.

See Figure 2 for an example of jumbled notes to which names have been added.

It is simplest if you use only the letters of the alphabet as sequence indicators. If you have more notes than letters of the alphabet, then go through again with two letter indicators: aa, ab, ac and so forth.

After you have penciled in all your variable names, write a MailMerge command file. A command file reads all the variables from a data file in the order it scans them. That is, the scanner is instructed to read a certain variable named in the dot command ".RV" and the next blob of data it comes to in the data file (your notes) is assigned to that variable name. Therefore it is extremely important that names and notes are synchronized here.

(There must be a limit to the amount of material and the number of variables which WordStar can read simultaneously by one command file. But with short note files, I have not yet run into that outside limit, whatever it is.)

Put a .DF command in your Merge-print command file, which refers to your note file for data. As far as Merge-print knows, your note file is a data file consisting of variable values.

Put a lengthy .RV command in your Merge-print file. Each variable will be read in the order now given—that is, in the same non-logical order of the original writing of the notes. The sequence of the .RV command is exactly the same as the sequence you penciled in along the margin of your notes. Every single note in your note file must be in-

cluded in the reading operation. Your .RV command might look as follows:

".RV x, d, b, g, c, a, f, . . . etc."

The sorting of the file takes place now, in the computer. For the "text" of your MailMerge file is nothing but a print-out of your notes in the order you desire. Put one reference to be printed on each line—in order. Since we used the alphabet to name the notes this is a simple matter and this part of the command file will always be the same. (You can write it once and copy it into any command file you subsequently use.)

When your Merge-print command file is complete, you are ready to read and print the notes. See Figure 3 for an example of a MailMerge command file.

You need not print your notes to paper. Print them to a new diskette! You can always print them to paper later or reformat to 52 columns wide and look at them on the screen.

One useful trick to learn about MailMerge is to use it to print to disk by answering "YES" to the Disk File Output" option. This makes up new merged or reordered files.

Some tips on Merge-printing to diskette: format the new file with the dot commands .mt O and .po O. Otherwise "printing" will take place at the default values; spaces for a top margin and left margin will be put into the new file. Also, end the MailMerge command file with just one carriage return, or WordStar might print out an extra blank page.

Now, if your variables have been carefully synchronized between the reading and the writing of them, your new file should have the same notes you wrote into the note file higgledy piggledy, but now arranged in the logical order you desire. See Figure 4, which is a printout of a disk file containing the orginal notes in sorted order.

The synchronization is very important. One note read out of order screws up all the following notes. For this reason this procedure works best with short files, say about one (packed) typewritten page in length, about 50 notes maximum.

Once your jotted notes are in some sort of order, you can start treating the material as text to be edited and re-written rather than as mere data to be sorted. Your new micro-sorted file is the basis for your own manual revision, the cutting, embroidering, and rewriting—perhaps in combination with other files—that results in a first draft of text or logical study outline.

Recapitulation:

1. Type notes one to a line in any order, using the N command. Each note is a piece of data. Keep short. No commas.
2. Print notes using PIP to LST.
3. Assign variable names indicative of order to each note. The alphabet makes good names.
4. Write a Merge-print file which uses the note file as a data file and reads the one-line variables in the order they are written.
5. For text of the Merge-print file, use the variable references in the new order you desire.
6. Merge-print the file to diskette. Merge-print will read the notes from the data file and print them out to the diskette in the new arrangement.

Following this procedure allows you to generate or collect notes at top speed without regard for the ordering of them. By temporarily divorcing content from form and working strictly on content, you are able to work faster. You may add to a file of notes at any time. Once you have a running start with some rough sorted notes to work on, it is easier to do the subsequent manual word processing: the cutting, revision, amplification and polishing of the raw material into a first draft.

This procedure allows you to generate or collect notes at top speed

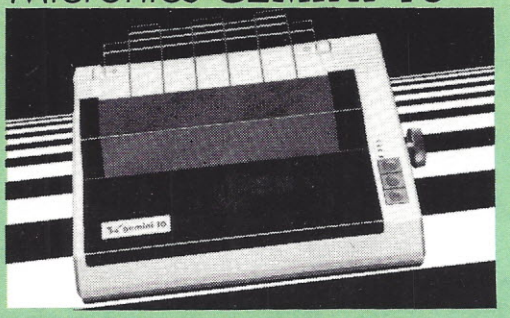
```
..COMMAND: a command file to
read notes and reorder
.MT O
.MB O
.PO O
.OP
..next is name of note file
.DF GOOSEY
..next command reads notes in
..existing order
.RV x,d,b,g,c,a,f,y,h,e,z
.."text" of this command file prints
..notes in new order desired. Note
..that x,y,z, although read in are not
..printed; found to be extraneous.
&a&
&b&
&c&
&d&
&e&
&f&
&g&
&h&
..end of new file
```

Figure 3

```
Goosey goosey gander
Whither shall I wander?
Upstairs and downstairs
And in my lady's chamber;
There I met an old man
   who wouldn't say his prayers;
I took him by the left leg
And threw him down the stairs.
```

Figure 4

Star Micronics **GEMINI-10**



$419.88 UPS DELIVERED

- 100 characters per second, bi-directional, logic-seeking printhead action (48 lines/min.) with 2K print buffer, expandable to 6K total buffer
- 9 x 9 matrix produces proportional, 10, 12, 17 cpi with true descenders, plus double width, double strike, italics, & special graphics characters
- 120 x 144 hi-resolution dot-addressable graphics matrix
- Subscripts, superscripts, underlining, backspace, plus 2K user-programmable character ROM, perf skip, vert/horz tabs
- Friction/tractor standard; handles 3-part forms (8.5")

VersaBusiness Series

VersaLedger II

VERSA LEDGER II is a complete accounting system that grows as your business grows. VERSA LEDGER II can be used as a simple checkbook register, expanded to a small business bookkeeping system, or developed into a large corporate general ledger system without any additional software.

- VERSA LEDGER II gives you almost unlimited storage capacity (300 to 10,000 entries per month depending on the system),
- stores all check and general ledger information
- prints tractor-feed checks
- handles multiple checkbooks and ledgers
- prints 17 customized accounting reports, including check registers, balance sheets income statements, transaction reports, account listings, etc.

VERSA LEDGER II comes with a professionally-written 160 page manual designed for first time users. The VERSA LEDGER II manual helps you become familiar with VERSA LEDGER IIs using complete sample data files supplied on diskette and more than 50 pages sample printouts.

VersaLedger..... **$121.88**

PRINTERS

C. Itoh
C. Itoh Prowriter..... **$499.88**
w/RS-232C..... **$609.88**
C. Itoh Prowriter 2..... **$734.88**
w/RS-232C..... **$789.88**
C.Itoh F-10 Starwriter, 40 cps
Parallel or RS-232C..... **$1499.88**
C.Itoh F-10 Printmaster, 55 cps
Parallel or RS-232C..... **$1799.88**
F-10 Tractor..... **$289.88**

Daisywriter

Daisywriter 2000..... **$1089.88**
Daisywriter Tractor..... **$149.88**
Daisywriter Cable..... **$49.88**

TEC
DMP-85 Printer..... **$469.88**

Okidata
Microline 82A..... **$439.88**
82A Plug-n-Play (PC)..... **$39.88**
80/82A Tractor..... **$59.88**
82A Roll Paper Holder..... **$49.88**
Microline 83A..... **$694.88**
82A/83A Okigraph ROM..... **$44.88**
Microline 92..... **$539.88**
Microline 93..... **$929.88**
Microline 84 w/graphics & tractor
Parallel, 200 cps..... **$1044.88**
RS-232C, 200 cps..... **$1164.88**

NEC PC-8023A..... **$509.88**

Smith-Corona
Smith Corona TP-1..... **$599.88**
10 or 12 cpi, parallel or RS-232C

CALL FOR PRICES on Centronics, Epson, Datasouth, Diablo, IDS, Qume and other printers.

MONITORS

Monitor Adapter..... **$49.88**
Monitor Cable..... **$9.88**

MONITORS

USI Pi-2 (12" green)..... **$159.88**
USI Pi-3 (12" amber)..... **$189.88**
USI Pi-4 (9" amber)..... **$159.88**

Zenith
ZVM 121 (12" green)..... **$139.88**

MODEMS

DC Hayes
Hayes 300 Baud..... **$234.88**
Hayes 1200 Baud..... **$569.88**

Novation
Novation 103 SmartCat..... **$224.88**
Novation 103/212 SmartCat... **$509.88**
Novation Cat..... **$159.88**
Novation D-Cat..... **$159.88**
Novation J-Cat..... **$139.88**

Signalman
Mark V..... **$94.88**

Multi-Line Junction Box..... **$39.88**

SOFTWARE

VersaReceivables
VERSA RECEIVABLES is a complete, menu driven accounts receivable, invoicing, and monthly statement-generating system. It keeps track of all information related to who owes you or your company money, and can provide automatic billing for past due accounts.

VersaReceivables..... $84.88

SOFTWARE

VersaPayables
VERSA PAYABLES is designed to keep track of current and aged payables, keeping you in touch with all information regarding how much your company owes and to whom. VERSA PAYABLES maintains a complete record on each vendor, prints checks, checks registers, vouchers, transaction reports, aged payables report, vendor reports and more.
VersaPayables..... $84.88

VersaPayroll
VERSA PAYROLL is a sophisticated, yet easy to use, payroll system that keeps track of all government required payroll information. Complete employee records are maintained, and all necessary payroll calculations are performed automatically, with totals displayed on-screen. A payroll can be run totally, automatically, or the operator can intervene to prevent a check from being printed, or alter information
VersaPayroll..... $84.88

VersaInventory
VERSA INVENTORY is a comp ete inventory control system that gives you instant access to data on any item. VERSA INVENTORY keeps track of all information related to what items are in stock, out of stock, on backorder, etc. stores sales and pricing data, alerts you when an item falls below a present reorder point, and allows you to enter and print invoices directly or to link it with VERSA RECEIVABLES system. VERSA INVENTORY prints all needed inventory listings, reports of items below the reorder point, inventory value reports, period and year-to-date sales reports, price lists, inventory checklists, etc.
VersaInventory..... $84.88

SOFTWARE

BUSINESS PAC 100
Diskette..... **$121.88**

Contains 100 ready to run business programs. Includes a 128 page user's manual. Contains programs like: Interest Apportionment by the Rule of 78...Annuity computations...Time between dates...Day of year a particular date falls on...Interest rates on leases.. Breakeven analysis...Straightline depreciation...Sum of the digits depreciation...Declining balance depreciation...Double declining balance depreciation...Cash flow vs depreciation... Print NEBS checks w/daily register... Checkbook maintenance...Mortgage amortization...Compute time needed to double, triple money...Salvage value of investment...Rate of return on investment with variable inflows...Rate of return on investment with constant inflows...Effective interest rate on a loan...Future value of an investment (compound)...Present value of a future amount...Amount of payment on a loan...Equal withdrawals...Discount analysis...Dated values...Value of a bond...Depletion analysis...Black Scholes option analysis...value of deffered annuities...Return on stock via discount dividends...Value of a warrant Value of a bond...Estimates of future earning per share...Alpha & beta variables for stocks...Portfolio selection.. Value of a right...Expected value analysis...Bayesian decisions...Value of perfect information...Value of additional information...Derive utility function... Siplex method for linear programs... Transport method for linear programs Economic order quantity inventory model...Waiting line model...Cost-volume-profit analysis...Conditional profit tables...Opportunity loss tables...Fixed quantity economic order quantity model...same, w/shortages...same, w/quantity price breaks...Cost-benefit waiting line analysis...Net cash flow analysis...Profitability index...Capital asset Pr. Model analysis...Weighed average cost of capital...True rate on loan...True rate on discounted loan... Merger analysis...Financial ratios for a firm...Net present value of a project... Laspeyres price index...Paasche price index...Construct seasonal quality indices...Time seriel analysis linear trend...Time seriel analysis moving average trend...Future price estimation DOME bookkeeping system...Time-clock totals...AP system storage...Generate invoices on-screen...MAILPAC letter-writing system...Mail list...List sort...Label maker...Name label maker...

These are just some of the many useful programs found on the BUSINESS PAC 100.

Information & Orders
(603)-881-9855
Orders Only: (800)-343-0726

No Hidden Charges

FREE UPS shipping on all orders—No extra charge to use credit cards—All equipment sold factory fresh with full warranty—Software solf on as-is basis with no returns—COD orders accepted ($10 fee added)—No purchase orders accepted—No foreign or APO orders accepted—Minimum $50 per order—This ad prepared in December: prices subject to change.

HIGH TECHNOLOGY AT AFFORDABLE PRICES

MasterCard VISA

THE BOTTOM LINE

MEMBER

MILFORD NH 03055-0423

Every week, 2500 more people like you are going to work with an Osborne® personal business computer.

They're moving faster than they were before.

Today, the Osborne 1 Personal Business Computer sells for $1795. Complete. Including software.

The Osborne is portable, because your ideas don't always happen at the office.

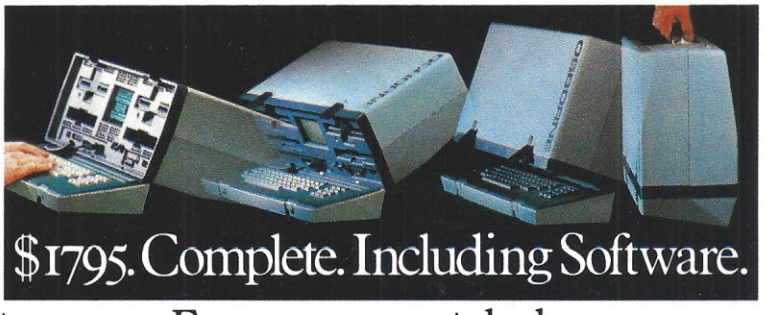
The Osborne is affordable, so there's no reason to wait.

The Osborne is complete.

Dollar for dollar, no other computer comes close.

The Osborne is easy to learn, fun to use, and quickly becomes indispensable.

A visit to your local authorized Osborne computer retailer will convince you that today, more than ever, how fast you go up depends on which buttons you are pushing.



For your nearest dealer, call (in California) 800 772-3545 ext. 905; (outside California) call 800 227-1617 ext. 905.

OSBORNE™
COMPUTER CORPORATION

The $1795 suggested retail price for the Osborne 1 (a registered trademark of Osborne Computer Corporation) includes a full business keyboard, built-in CRT display, two built-in floppy disk drives, CPU and 64 kilobytes of RAM memory, RS-232 and IEEE 488 interfaces, and the following software packages: WORDSTAR® word processing with MAILMERGE® (a trademark and a registered trademark of MicroPro International Corporation of San Rafael, California); SUPERCALC© electronic spreadsheet system (a trademark of Sorcim Corporation); CBASIC® (a registered trademark of Compiler Systems); MBASIC® (a registered trademark of Microsoft); and CP/M® (a registered trademark of Digital Research).

The academic and WordStar

Preparing term papers, dissertations and theses

Edward F. Leddy

This article was born out of nine months and many hundred hours at the keyboard, preparing a PhD. dissertation. It focuses on time-saving techniques designed to help the academic user get the most out of his/her computer and Epson printer when composing term papers, theses and reports.

Most colleges and universities require that you comply with either "Turabian" (Chicago Manual of Style) or A.P.A. (American Philological Association) formats and many teachers are rigid about following them exactly. Since these formats were designed for typewriters, the computer user cannot take advantage of many of his/her printer's features. Double size or condensed print faces are definitely out. However, if you employ emphasized or boldface print for the entire paper, the instructor may not realize it was created with a dot matrix printer.

To make a success of the following information, you should install your Epson printer in the manner outlined in "WordStar With Epson," by Jim Wooley, in the June/July issue of the Portable Companion (pages 22-23). Be sure to use the patches that make superscript and suscript work.

To make your papers easy to compose, set the Special Function Keys (SFKs) as shown below. These settings will allow you to do most of the formatting automatically.

0. Initialization; log Drive B; right margin 52: double spaced; HELP level 2:
   B:[cr]H2DT[cr] ^OR52[cr] ^OS2[cr] ^K ^QY
1. Centers headings and prints underlined boldface:
   ^PB ^PS ^OC
2. Underline and boldface—not centered:
   ^PB ^PS
3. Sets margins and spacing for long quotes:
   ^OG ^OG ^OS1

Use the other SFKs for common expressions in your field.

If you have a word or expression that you use often, but you don't want to put it on a SFK, use a code or initials for it when you type the text. When you've finished, use FIND and REPLACE (^QA) to put in the full expression (see *Common WordStar Commands* on the following page).

If you use A.P.A. format, footnotes are easy to handle. You simply put the author's name, year published and page reference at the end of the quote. Later you can compile these to create the bibliography at the end of the paper.

In Turabian, a miserable, pedantic, and unfortunately, widely–required system, footnotes are more of a problem. They have to occur at the bottom of the page and must be numbered. If you're lucky enough to have the *Footnote* software program for the Osborne 1, you're in great shape. Otherwise, the following method works in a pinch.

Type the footnote just under the quote and leave it there during the editing process. When you're ready to complete a final draft, you know what page each footnote will occur on. Number both the quote and footnote with a subscript ^PV. Then use the block move feature (^KB) to mark the beginning and ^KK to mark the end of the footnote. Execute ^KV to move each footnote to the bottom of the page.

To construct a bibliography, use the COPY block ^KC command to move your footnotes to the end of the paper, while leaving them intact in the text. You'll have to change the content of the footnotes slightly to use them in a bibliography, but this is much easier than doing a complete rewrite.Voila!

Common WordStar Commands

Edward F. Leddy

SET MARGINS

^OR Set right margin
^OL Set left margin
^OC Centers text
^OS Change line spacing
^OF To resume previous margin, place cursor in line previously typed
.MT Top margin (defaults to 3 lines)
.MB Bottom margin (defaults to 8 lines)
.PO Page offset (Defaults to 8 spaces. For those of you wondering why your printer moves over 8 spaces from the left side, this is the reason why. Use .PO 0 to eliminate any offset.)
.PL Paper length (default length 66)

MOVING

^QC Move quickly to END of file
^QR Move quickly to START of file
^QB Move quickly to BLOCK beginning
^QK Move quickly to BLOCK end
^KS Move to START of file and save
^KQ Go to "No File Menu"
^S Move cursor left one character
^D Move cursor right one character
^A Move cursor left one word
^F Move cursor right one word
(see manual for other cursor movement commands)

SAVING

^KS Move to start of file and save (and continue editing)
^KD Save and go to "No File Menu"
^KX Save and take a coffee break
^KQ Abandon ship (exit without saving)

REFORMING TEXT & PAGES

^B Reform text (cursor at beginning of paragraph)
.CP Start a new page IF the text is longer than set line number
.PA Start a new page

DELETE

^G Single Character to the right
^- (control hyphen) delete character to the left
^T Word to right of cursor
^Y Entire line
^KJ Entire file (use with caution)
^KY Delete block

SCROLL

^Z Scroll down one line
^R Scroll down screen
^W Scroll up one line
^C Scroll up screen

MOVING TEXT

^KB To mark beginning of text to be moved
^KK To mark end of block
^KV To move block of text to new location of cursor
^KC To copy block of text in new location and leave it in original location
^KH To remove highlighting of block of text
^KW Write block to another file
^KR Read block in at cursor location from another file (a powerful command)

FIND AND REPLACE

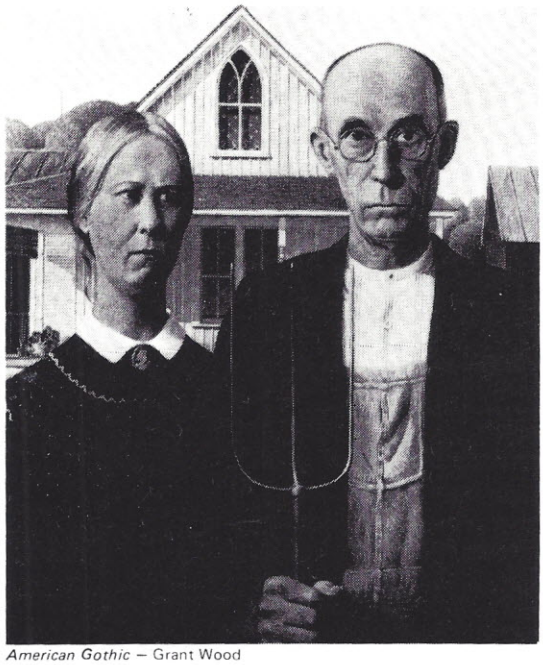
^QF Find only (searches forward from cursor location unless option B is specified)
^QA Find AND replace options:
- G change all occurences of a word
- N don't stop to query
- U find both upper and lower case instances
- W ignore if in a longer word
- B searches backward from cursor location

PRINT COMMANDS

^PB Boldface: execute before and after text to be boldfaced
^PD Doublestrike: execute before and after text
^PS Underline: execute before and after text
.HE Heading
.FO Footing
.OP Cancels page numbers

(Obviously not all of the commands have been listed in this "cheat sheet." We've concentrated on the more commonly used ones. You may want to add more of your own.)

Buy the BEST for LESS



American Gothic – Grant Wood

BusinessMaster Plus is one of the most comprehensive and professional business and accounting packages available. The General Ledger, for example, was designed around the IMS format to fit the requirements of a major New York based accounting firm. The Fixed Asset accounting package was designed to fit the needs of a San Francisco based Financial Investment house. Together, the General Ledger, Payroll, and Fixed Asset accounting package provide one of the finest Client Writeup packages available at ANY price.

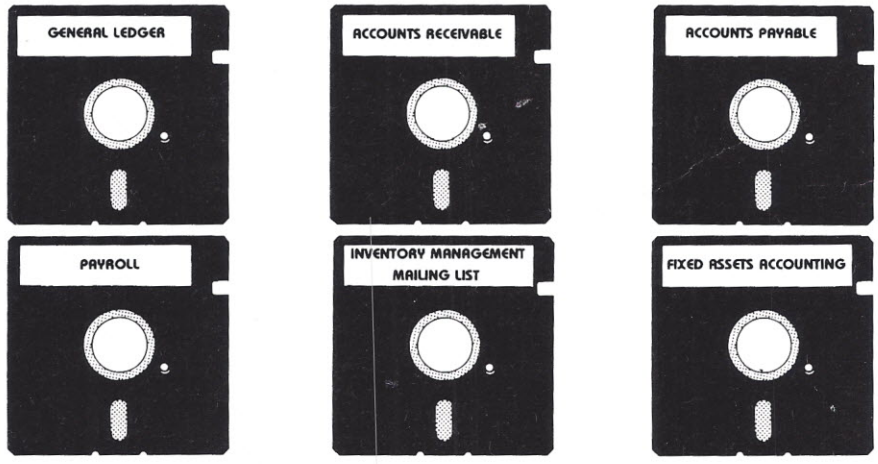
The package includes General Ledger, Payroll, Fixed Asset Accounting, Accounts Receivable, Accounts Payable, Inventory and a Mailing List package. These are all implemented under FULL menu control, integrated, and provide for data entry from fully formatted, fill-in-the-blanks data entry screens.

Most importantly, we have incorporated FABS2 from Computer Controls in Largo, Florida as a Fast Access Balanced BTree file indexing system to allow for rapid access to records by KEY rather than record number. The result has to be seen to be fully appreciated. We know of no other accounting package that offers BTree indexing!!!

We've been told by numerous people that this package should sell for at least $5000 but we prefer to take the position that we'd sooner sell 10,000 copies at $289 than 100 at $5000. Actually we think we'll sell a LOT more than 10,000!

(We still have BusinessMaster II + available at $159.)

BusinessMaster Plus



Available for

All 8" CP/M, CBASIC2 computers including S-100 bus, TRS-80 Mod II, Xerox 820 and others.
Also available for many 5¼" CP/M, CBASIC2 computers with 80 x 24 displays and 64k of memory including Apple II, Xerox 820, Heath/Zenith, Kaycomp II, SuperBrain and IBM PC with Baby Blue. Available soon under CBASIC86.

The BusinessMaster Plus package includes:
1– Over 700,000 bytes of compiled code on appropriate diskettes OR, at extra cost, over 1,300,000 bytes of source code on appropriate diskettes packaged in a library box.
2– An easy-to-use, menu oriented user manual (over 250 pages.)

Send $289 for BusinessMaster Plus

BusinessMaster Inc.
4317 Sea Bright Dr.
Carlsbad, CA 92008
Order and Technical Number (714) 434-6165

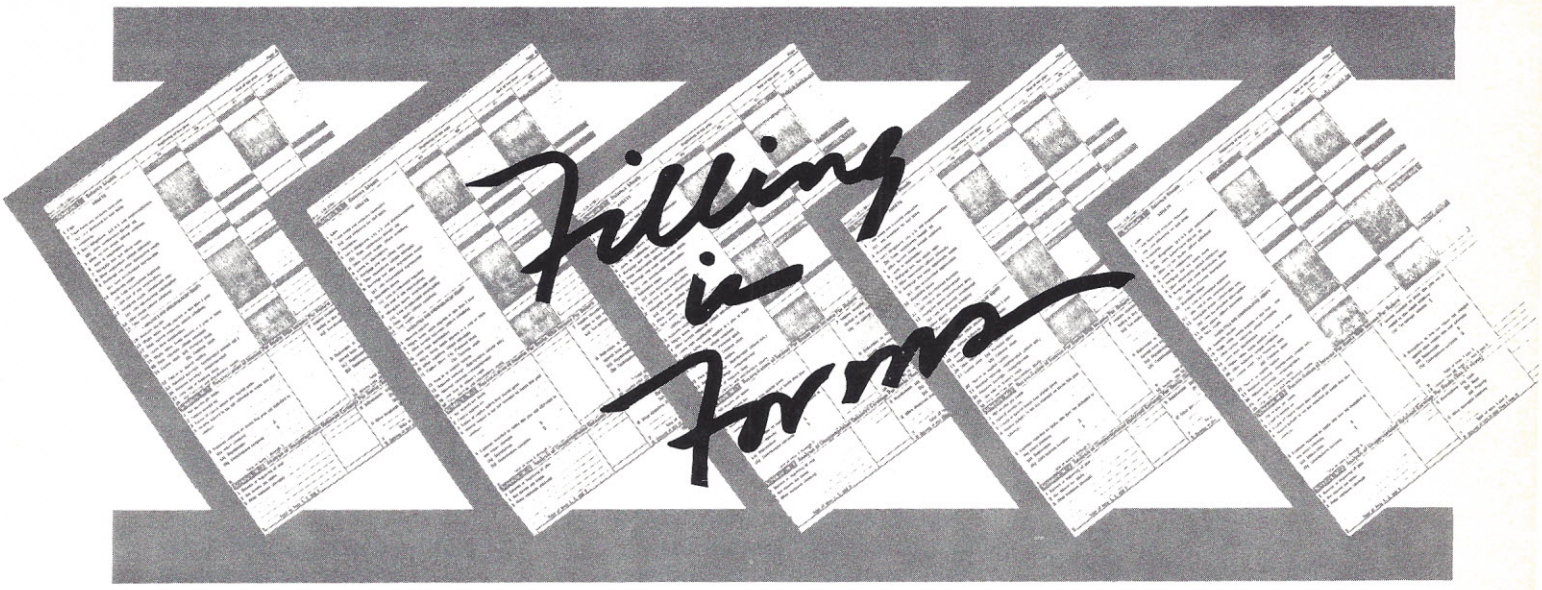
Name _____

Address _____

City/State/Zip _____

☐ **Visa** ☐ **Mastercard**
Number _____ **Expires** _____
Your System _____
Disk Size ☐ **8" single density** ☐ **5¼"**

Dealers, Distributors and Manufacturers Inquiries Welcome.



WordStar tackles preprinted forms

Scott Rainey

We all have to fill in forms. Tax forms, contract forms, midterm exam essay questions, government forms of all kinds; and of course those report forms that upper management always springs on you at the worst possible moment.

My typing isn't very good, but my handwriting is worse, so filling out a pre-printed form neatly has always been a near impossibility for me. On the rare occasion when I did fill one out neatly, there were always the globs of white-out on the form.

WordStar has a feature that allows me to fill in the blanks on any pre-printed form with perfectly typed information. That feature is the WordStar pause-print command ^PC (which is seen on the screen as ^ C). When printing, each time WordStar encounters a ^C in your file it stops your printer and prompts you to press the "P" key to resume printing.

When you press "P", your printer resumes printing the text (^C will not be printed of course) until it encounters another ^C where it will pause again. During a fill-in-the-form exercise, this allows you to reposition the print head at the next blank, and resume printing.

If your printer doesn't allow you to position the print head, you will have to set page offsets on your fill-in file. First count the spaces from the left side of the form to the blank to be filled in. Use this number and a dot command for page offset. (.POXX) above each fill-in blank in your fill-in file.

Be very careful about properly aligning your page and counting spaces. Don't forget that your standard installation of WordStar will add eight spaces of offset on its own.

If you have a form that you use frequently, make yourself a fill-in file, with all the blanks you usually encounter neatly laid out. You may want to identify all of your fill-in files with names like:

FILENAME.FIL.

Making a Fill-in File

To make a FILENAME.FIL file, simply identify each blank in your form with the double period dot command, and put an "@" on the line below it. WordStar interprets two periods in the first two columns as comments that are ignored in normal printing. The "@" is a find-and-replace character, which is replaced with a ^C later.

```
. .  (comments identify the blank
      to be filled in)
@    (your input for filling in the
      blank here)
. .  Next Blank Space Identifier
@    Etc. etc. etc.
. .
@
```

Filling In Your Form

Once you have FILENAME.FIL set up, whenever you have to complete another copy of that form, you simply call up the file and fill in the blanks.

Now instead of saving the file with ^KD or ^KS, make the entire file into a block (^KB at the top, ^KK at the bottom) and write (^KW) the entire file to a "scratch file."

Next, use the "Find and Replace" command (^QA) to replace all of the @'s with ^C (^PC). Use the find and replace options G and N (G = Replace every occurrence in the file; and N = Replace without asking) to make this a painless and fun-to-watch process.

```
.PL200################
.POØ        Filename.FLL
.MTØ::::::::::::::::::::::::::::::::::::::::::::
.OP    Routine for Filling Out
..                Blank Form:
..———Formname.etc.———
..::::::::::::::::::::::::::::::::::::::::::::::
              DIRECTIONS
.. Each phrase after two
.. periods will identify a blank
.. to be filled in on FORM-
.. NAME.
.. After each @, fill in the
.. words, numbers or
.. phrases that you other-
.. wise would put onto
.. the blank form.
.. Make the entire file a
.. block with ^KB, and ^KK.
.. Write the block to a
.. Scratch File [ ^KW]
.. Use Find-and-Replace
.. [ ^QA with G & N Options]
.. to change
.. the @ to ^C. [Use ^PC
.. to display ^C]
.. Save to second Scratch
.. file with ^KW.
.. Print the ^C scratch file
.. on the blank form, posi-
.. tioning the print head over
.. proper blank spaces, using
.. printout from 1st Scratch
.. File with the @'s for
.. Reference.
..######################
```

Figure 1

The file should now look like:

```
. .    (Comments identifying
       blank to be filled in)
^ C    (your input for filling in the
       blank here)
. .    Next blank space identifier
^ C    Etc. etc. etc.
. .
^ C
```

Again, write the whole file in a block to a second scratch file.

Keep your original fill-in file unchanged by using ^KQ to exit, without changing anything in your format file. If you do screw up and press ^KD by mistake, you can always salvage the original which has now become a back up.

Now print the first scratch file (the one with the @'s) to proof your work, and give you a map to guide you in filling out the form. When you execute the print commands, don't press ESC to save yourself all of those carriage returns. Instead, go through the print menu and answer Yes to "Supress Page Formatting?" WordStar then prints out the double period comments.

You are now ready to fill in the form by printing the second scratch file, the one with the ^C's. Load the form into your printer, tell WordStar to print the second scratch file, and press ESC to avoid all of those RETURNs. The printer should line feed once or twice and then you will see the prompt on the screen tell you to press "P" to continue printing. Position the print head over the blank you want to fill in and press P. Your Ozzie will whirr & grind as your printer fills in the first blank, does a carriage return, and pauses again. Repeat this process for each blank, using your printout from the first scratch file to guide you.

Practicing a few times with a copy of the form is a good idea to help you get the hang of how it works.

Headers

Your fill-in file should have the following dot commands at the top to keep you from having to backspace eight places before each blank you want to fill in, and also to keep your printer from breaking for pages and entering page numbers at inappropriate times.

```
.PL2ØØ  (print up to 2ØØ lines
         without a page break)
.POØ    (Page Offset Zero)
.MTØ    (Top Margin Zero)
.OP     (Omit Page Numbers)
```

As a reminder to yourself or a coworker of how the fill-in file works, put the following header block (Figure 1) at the top of every fill-in file. It is 21 lines long, and with WordStar help level set to 0, 1, or 2, it will fit the first screen when the fill-in file is called up.

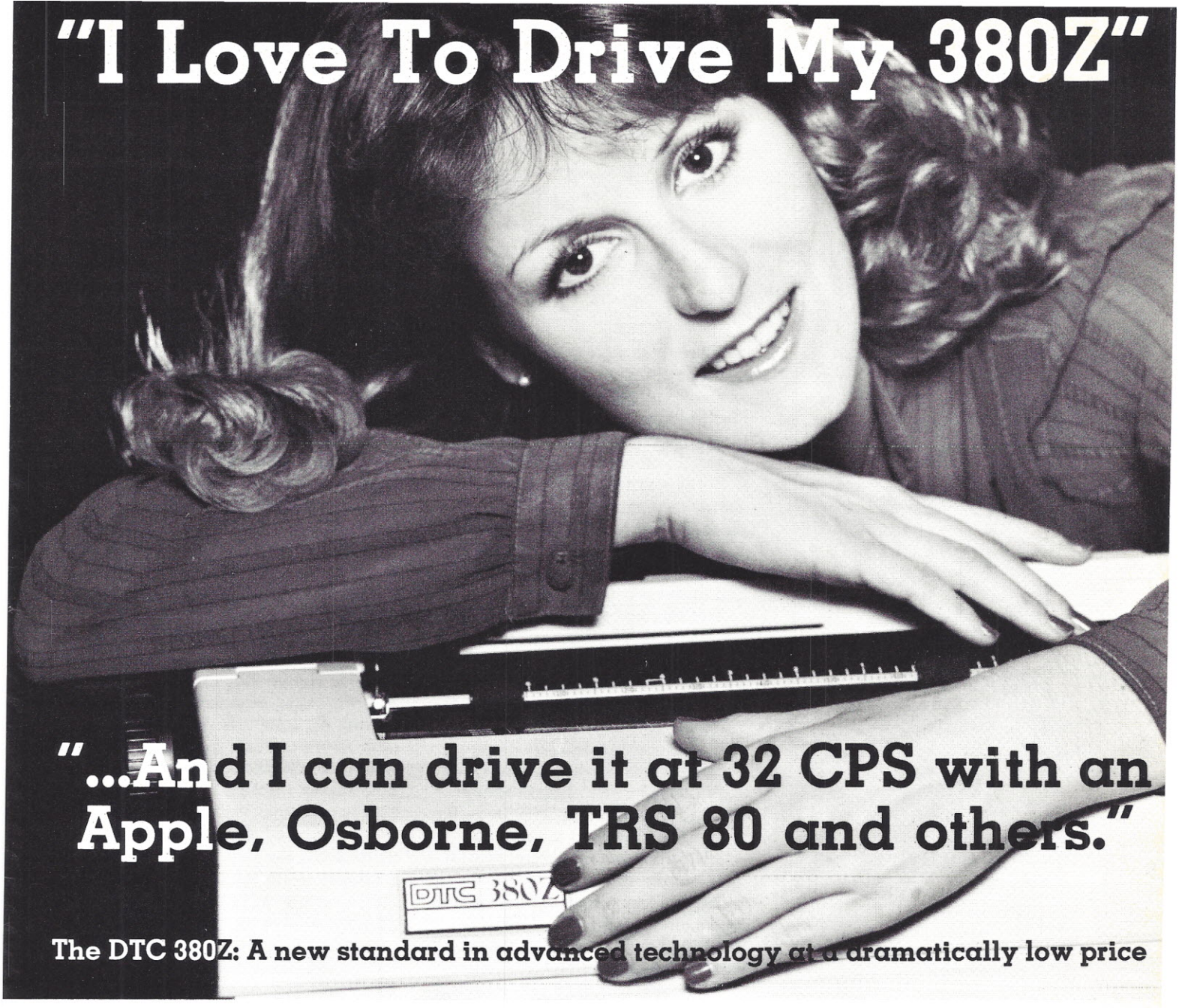
I recommend that if you use this header, or one of your own devise, you make a file called something like HEADER.FIL. Once you have the file set up, you won't have to retype the header each time. Simply read HEADER.FIL into the top of any subsequent fill-in file using the "Insert a File" command (^KR).

Two last notes.

If you use @ in your text files, then naturally you will want to use some other character for the find and replace character. Likely candidates are I#%&*][\ or !.

You probably noticed that the four dot commands I suggested are at the top left corner of the header block. Since any words inserted after a dot command do not print, this is a good place to put your comments, since it saves a few lines. However, if you think you need to make you dot commands more visible, you can always put them at the bottom of the block.

"I Love To Drive My 380Z"



"...And I can drive it at 32 CPS with an Apple, Osborne, TRS 80 and others."

The DTC 380Z: A new standard in advanced technology at a dramatically low price

- **48K buffer for high speed throughput**
- Diablo 1640/1650/630 software compatible
- Serial and parallel interfaces
- Serial baud rates to 19.2K
- Automatic baud rate selection
- Four CPU's, no cables, belts, wheels or pulleys

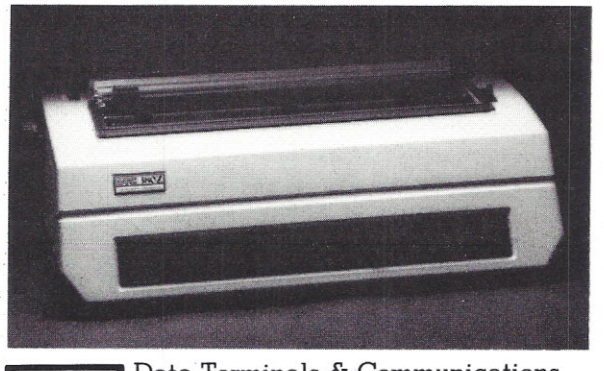
- **Letter quality daisy wheel printer**
- 12 print styles, 15 languages, 96 char. wheel, standard ribbon
- Automatic bi-directional printing
- Proven reliability 100,000 printer mechanisms produced

- **Up to 32 CPS print speed in typical applications**
- Interconnecting cables for all major micro-computers
- Automatic proportional spacing
- Parallel 6K bytes per sec. transfer rate
- Optional extras: forms tractor, cut sheet feeder.

MONEY BACK GUARANTEE

IN STOCK • ORDER NOW
VISA • MASTERCARD

800-962-8185
in CA 800-538-9294



The DTC 380Z
DAISY
Wheel Printer

$1359.00

DTC Data Terminals & Communications
590 Division St., Campbell, CA 95008

by rory donaldson

OSBORNE SETS WORLD ALTITUDE RECORD

Three firsts were set for the Osborne computer during the last week of September, 1982. First, the machine was lofted to a world's land record height of 9,100 feet in the Colorado mountains. Second, an Osborne was sold at 9,100 feet. Third, the Osborne 1 modern computer was the technological backbone of the world's first seminar devoted to improving both physical fitness and business productivity.

The idea was to focus on what have become two essential components of productivity in today's market; "physical well-being and productivity" and "how to get more productivity out of your work day." The seminar was developed by Achievements in Microsystems, the Colorado Outward Bound School and OSBUG (the Osborne Santa Barbara User's Group.) It took place at Outward Bound's beautiful Marble Base Camp, outposted in the thick of changing Aspen trees, sunny streams and snowy peaks.

Even though I had seen the ads, I wasn't exactly sure how my first airplane trip with a computer would go. I packed up my Osborne and packed my Epson MX-80 F/T in an aluminum equipment case cushioned with foam. Grabbing my diskettes and sweater, I was off.

The equipment travelled superbly. The stewardess helped me stow my printer and the Osborne fit perfectly under my seat. I had planned on plugging into the electrical shaving outlet in the restroom, but never made it, fearful of being mistaken for a technological saboteur.

In Colorado, I was met by Out-Ward Bound's (OB) Base Camp Director in Marble, Jerry Ahlberg. Jerry was very amused at first to see me carrying what he mistook for a sewing machine. We had a good laugh about that and immediately started searching for a place to plug in. After a 5½ hour car trip through the mountain scenery we finally arrived at the camp and located a plug.

The Outward Bound schools are built on a tradition of challenge and leadership. One of their summer base camps consists of a collection of cabins high above the remote town of Marble, Colorado. Marble, nearly a ghost town now, was once the quarry site of the marble for, among others, the Lincoln Memorial.

Upon arriving at camp, we set up the Osborne and almost immediately Marlene Hammond, Course Director and Marketing Manager for OB, was playing the computer game *Adventure*. *Adventure* is a game where the computer acts like a gigantic cave. You wander through this cave by giving the computer instructions encountering adventures, dangers and riches along the way. This was a great way to introduce these first time computer adventurers to the wonders of modern computing.

During the week, many sessions focused on "How Computers Help You Produce." As you might imagine, regular discussions were held on Financial Projection, Telecommunications, Generating Reports and Word Processing. A *SuperCalc* model was begun that records calories eaten versus calories burned during exercise. The results gave some surprising long-term projections on how much fat you can expect to lose or gain over the period of a few months. There was plenty of good food, beer and brandy, so the opportunities for consuming a few extra calories were abundant.

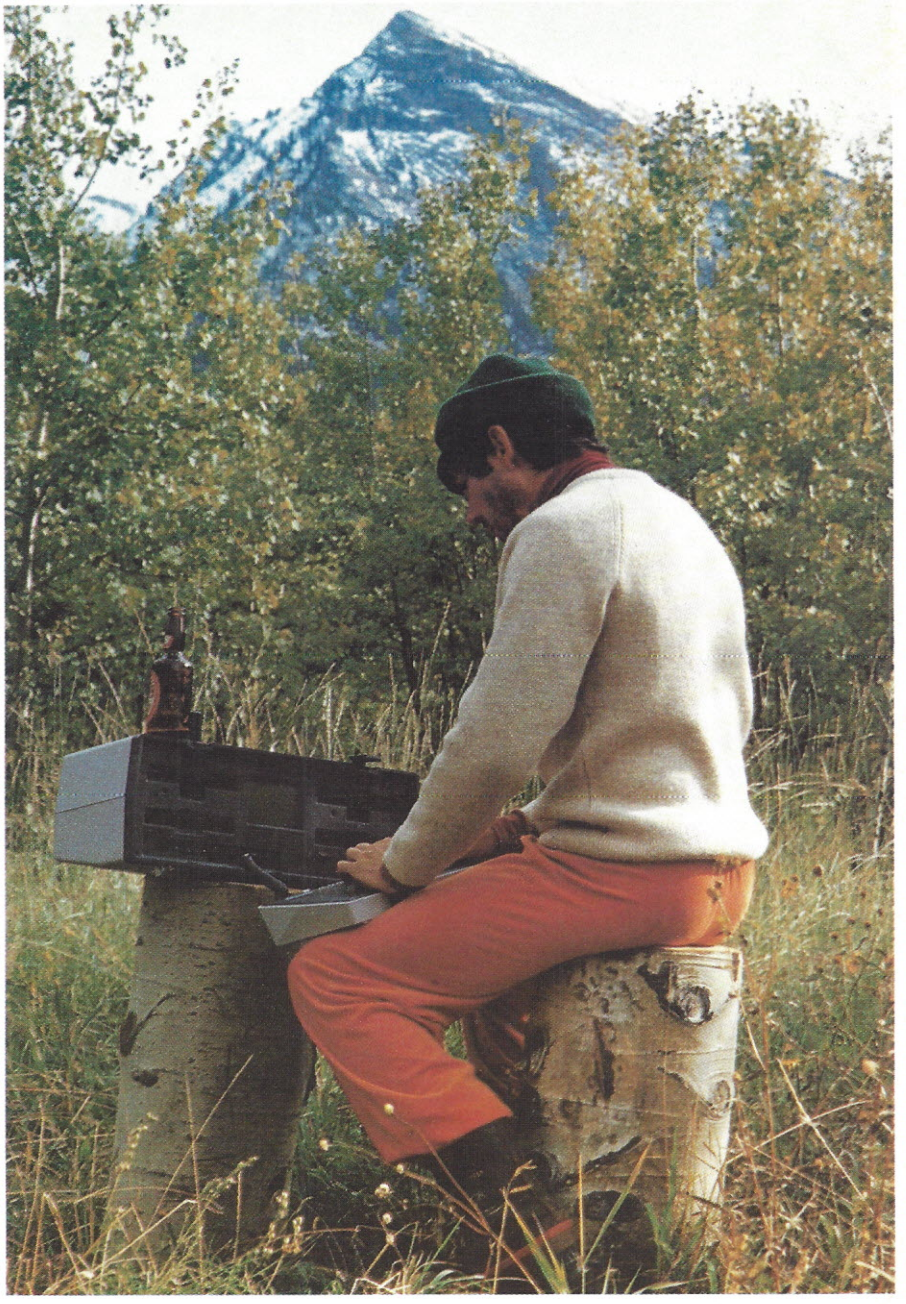
In conjunction with the introduction to the computer came fitness. Some of the most skilled outdoor educators in the country were there to address jogging, stress reduction and weight-loss questions. Everyone agreed that in today's market two

essential components of productivity are physical well-being and a knowledge of how to get more work out of the day. The fact that the Osborne was there to demonstrate its capabilities for both challenges impressed everyone. No one could imagine lugging one of those multi-component Brand X deskbound turkeys that the competition offers to 9,100 feet.

Computer Fitness Seminars. This informal experiment was attended by ten people who didn't know quite what to expect. At the end of the seven days everyone had covered a number of scenic miles on foot and experienced perhaps for the first time, how a modern computer can really turn out the work. Minds were opened. Hearts and lungs were filled with oxygen. The idea was such a success that a larger version of the Computer Fitness Seminar is being planned for late winter in Santa Barbara. This is Southern California's most beautiful time of the year. There's plenty of sun and water. We won't set a new world's altitude record in Santa Barbara, but our schedule promises some exceptional education, fun, and fitness.

For details, contact Rory Donaldson, c/o Achievements In Microsystems, 10 E. Figueroa #2, Santa Barbara, CA 93101.

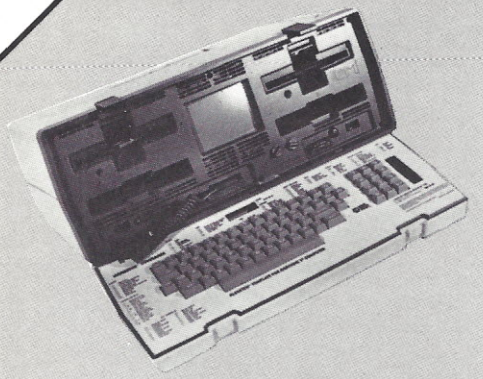
Rory Donaldson is a computer salesman and educator with Achievements In Microsystems Santa Barbara, CA. Previously he was Editor and Program Advisor for the National Jogging Association in Washington, D.C. and is the author of numerous articles and books.

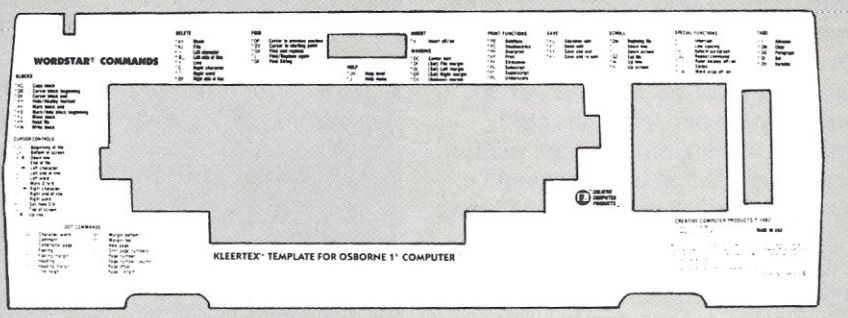


Rory Donaldson running a Break Even Calorie Analysis at 9,100 ft. That's Whitehouse Peak in the background. There were no battery packs so we had to stay within extension cord distance of the cabins. Next year battery packs.

NEW TIME-SAVER

IMMEDIATELY VISIBLE PROGRAM COMMANDS for the OSBORNE I™ COMPUTER





- ALPHABETICAL LISTING OF COMMANDS
- EASY TO READ
- QUICK ACCESS
- DURABLE PLASTIC
- NON GLARE SURFACE
- COLOR COORDINATED
- FITS INTO CASE

KLEERTEX™ TEMPLATE ONLY $19.95

CREATIVE COMPUTER PRODUCTS™

OSBORNE i is a trademark of the Osborne Computer Corporation. WORDSTAR is a registered trademark of the Micro Pro International Corporation. D BASE II is a trademark of Ashton-Tate, Inc. M BASIC is a registered trademark of Micro Soft. Supercalc is a trademark of SORCIM, Inc. Creative Computer Products is an independent company, specializing in Sophisticated Solutions for computer operators.

CUT HERE

Please send me the following KLEERTEX™ TEMPLATE(S) at $19.95 each plus $1.75 postage and handling charge: (California residents add 6% sales tax.)

____ WORDSTAR® Commands ____ SUPERCALC® Commands ____ D BASE II® Commands ____ M BASIC® Commands

I WANT TO PAY FOR KLEERTEX™ TEMPLATE(S) AS FOLLOWS:

☐ Check Enclosed ☐ VISA
☐ Master Card ☐ Money Order

For Model:

☐ Beige/Black
☐ Gray/Blue

(PLEASE PRINT CLEARLY)

CARD NO. _____ EXP. DATE _____

SIGNATURE _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

Mail Order Form Today To:
Creative Computer Products
P.O. Box 85152 • MB134
San Diego, CA 92138

(619) 268-0793

Dealer inquiries welcomed.

☐ **Please send your FREE catalog of products for the OSBORNE 1™.**

VISA

© CREATIVE COMPUTER PRODUCTS™ 1982

MasterCard

Test your reaction time

A program to create a homemade stopwatch

Brad Baldwin

This deliberately simple program was written to demonstrate the rather obscure INKEY$ function and to have some fun along the way. The program also illustrates a random number delay loop; a numerical counter that serves as a stopwatch; and a variation on the INPUT$ statement. Beginning programmers will also find examples on how to clear the screen, ring the bell, and combine multiple statements on one line.

The INKEY$ statement allows you to input from the keyboard any character without printing it on the screen. For you to quickly see how this works, type in the following statements using your MBASIC software:

```
10 A$=INKEY$
20 IF A$="H" THEN 30 ELSE 10
30 PRINT "You must have hit the H key!"
```

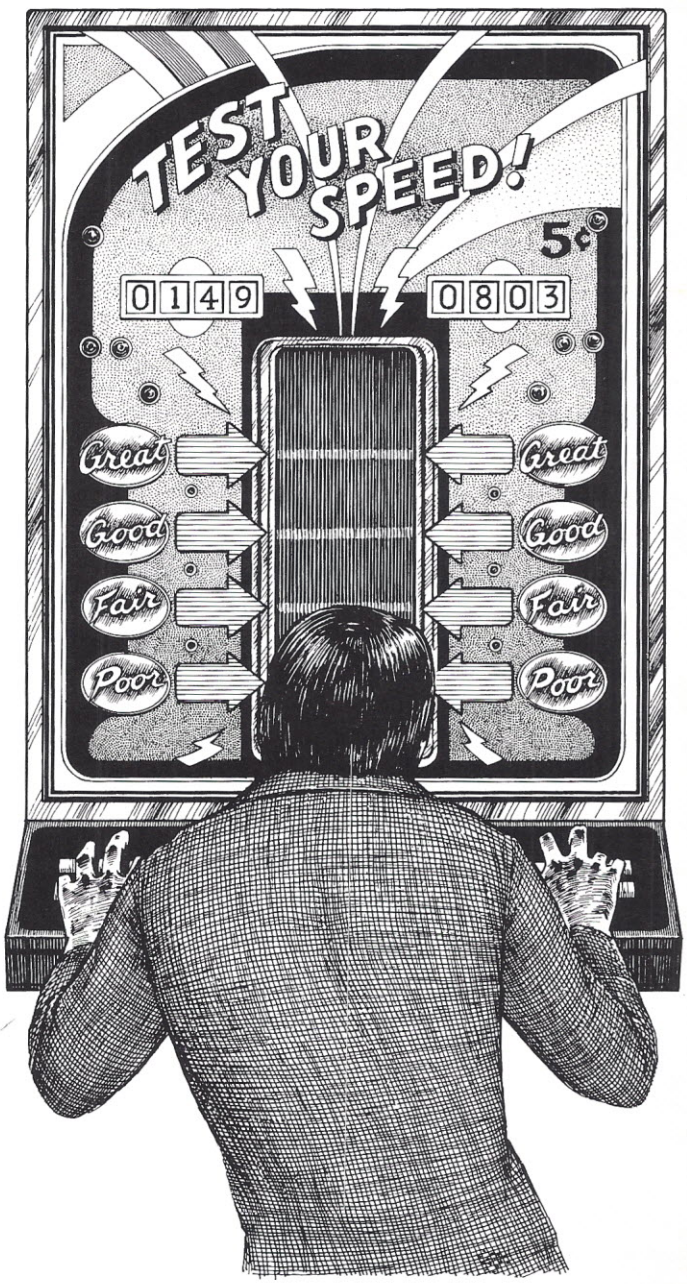
Line #20 is only looking for an uppercase H keyboard input. All other keyboard entries—including no entry—will cause the program to loop back to line #10.

By the way, reaction times are how fast one reacts to some form of stimulus, i.e., when the boss cracks the whip, how fast do you jump! (This program uses a bell and a screen message instead of a whip, so not to worry.) Your reaction time is calculated by how long it takes to react to the bell by hitting the spacebar key and stopping the program's counter. Rube Goldberg, eat your heart out.

Okay, on to the program. Each section will be explained to benefit those individuals just learning about the wonders of MBASIC.

Let's Do It!

We begin by doing some housekeeping. The CLEAR statement is not used very often, but it is necessary in this program as we'll soon see. Incidentally, the apostrophes before the descriptive statements on the right are ignored by the computer. We use them as simple messages for the poor, hapless programmers that need to interpret a program written by other individuals.



```
10 CLEAR              'sets variables to zero
20 PRINT CHR$(26)     'clears screen, homes cursor
30 COUNTER=0          'sets counter to zero after every pass
```

Statement 40 calculates a random number integer between 1,000 and 8,000. This is used in conjunction with statement 60 to give us a random delay loop. The delay makes it difficult to anticipate when the reaction time signal begins.

```
40 A = INT(RND(1)*7000+1000)
50 PRINT "Hit the spacebar when signaled....."
60 FOR DELAY=1 TO A:NEXT DELAY
```

This particular INKEY$ function prevents you nasty cheaters from having the spacebar key (or any key, for that matter) pressed down before the start of the reaction timing. Notice that the quotes are together; it means if the computer sees no keyboarded characters, then proceed to line 120, otherwise print "CHEATER!"

```
70 C$=INKEY$
80 IF C$="" THEN 120 ELSE 90     'no space in between quotes
90 PRINT "CHEATER!  You pressed the key before the signal or"
100 PRINT "         perhaps the key bounced twice previously."
110 GOTO 40
```

Rings bell, starts counter, awaits a spacebar input. COUNTER/135 gives a fairly close approximation of actual seconds gone by before the spacebar was hit. The PAUSE loop slows the program down to give you a little time to rest before the next test.

```
120 PRINT CHR$(7):PRINT "GO! GO! GO!"
130 SB$=INKEY$
140 COUNTER=COUNTER+1            'increments counter
150 IF SB$=" " THEN 160 ELSE 130 'space in between quotes!
160 SECS=COUNTER/135
170 PRINT SECS;"seconds":PRINT
180 FOR PAUSE = 1 TO 1000:NEXT PAUSE
```

The program loops four times and then averages the total reaction time. With R = 4, the program goes to line 230 to perform the actual calculation of your average reaction time.

```
190 TOTAL=SECS+TOTAL
200 R=R+1
210 IF R=4 THEN 230 ELSE 220
220 GOTO 30
230 PRINT "Your average reaction time is";TOTAL/4;"seconds."
```

The INPUT$(1) command takes in any keyboarded character and immediately jumps to the next line. The character is not echoed to the screen, and the RETURN key is not required after input. An upper or lower case "Y" allows the program to restart at the very beginning.

```
240 PRINT "Want to try it again?(Y or N)":J$=INPUT$(1)
250 IF J$="Y" THEN 10
260 IF J$="y" THEN 10
270 PRINT:PRINT " Bye!  Thanks for playing."
```

That should do it! So there is no confusion, I do want to point out that COUNTER, DELAY, PAUSE, SECS, and TOTAL are all made up variable names. In other words, do not think they are built in or actual MBASIC functions.

Although this home stopwatch is not completely accurate, it does give you a way of comparing yourself to your computer buddies. An average time is probably around .21 seconds. Non-Osborne 1 owners will, of course, have a much slower reaction time!

Summary

```
10 CLEAR              'sets variables to zero
20 PRINT CHR$(26)     'clears screen, homes cursor
30 COUNTER=0          'sets counter to zero after every pass
40 A = INT(RND(1)*7000+1000)
50 PRINT "Hit the spacebar when signaled....."
60 FOR DELAY=1 TO A:NEXT DELAY
70 C$=INKEY$
80 IF C$="" THEN 120 ELSE 90     'no space in between quotes
90 PRINT "CHEATER!  You pressed the key before the signal or"
100 PRINT "         perhaps the key bounced twice previously."
110 GOTO 40
120 PRINT CHR$(7):PRINT "GO! GO! GO!"
130 SB$=INKEY$
140 COUNTER=COUNTER+1            'increments counter
150 IF SB$=" " THEN 160 ELSE 130 'space in between quotes!
160 SECS=COUNTER/135
170 PRINT SECS;"seconds":PRINT
180 FOR PAUSE = 1 TO 1000:NEXT PAUSE
190 TOTAL=SECS+TOTAL
200 R=R+1
210 IF R=4 THEN 230 ELSE 220
220 GOTO 30
230 PRINT "Your average reaction time is";TOTAL/4;"seconds."
240 PRINT "Want to try it again?(Y or N)":J$=INPUT$(1)
250 IF J$="Y" THEN 10
260 IF J$="y" THEN 10
270 PRINT:PRINT " Bye!  Thanks for playing."
```

FINALLY!
PERFECT SOFTWARE

MICROHOUSE
MICROHOUSE
MICROHOUSE
MICROHOUSE
MICROHOUSE
MICROHOUSE
MICROHOUSE

PERFECT WRITER - simply the best, advanced featured word processor available. Perfect writer features an easy-to-use manual and step-by-step instructional diskette.
List $495 **Microhouse $239**

PERFECT CALC - Perfect Calc creates a new standard in financial spreadsheets. Allows useage of seven different data files at the same time! And, like all the other Perfect software interacts with perfect writer.
List $295 **Microhouse $149**

PERFECT FILER - The perfect data entry and retrieval program, features 2 standard mailing list formats, record of correspondence, sorting, reports and much, much more. Plus, it interacts with perfect writer.
List $595 **Microhouse $299**

PERFECT SPELLER - Round off the perfect package with a perfect speller. This 4,000 word per minute spelling checker features an expandable 50,000 word dictionary.
List $295 **Microhouse $149**

SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT
SALES PLUS SUPPORT

MICROHOUSE

CALL TOLL FREE:
1-215-868-8219

IN PA:
1-215-868-8219

FOR TECHNICAL SUPPORT:
2-215-868-4133

P.O. BOX 498, BETHLEHEM, PA 18016

DEALERS INQUIRIES WELCOME

Perfect Software is available for IBM, 8" CPM, Apple, Northstar, Superbrain and Osborne format.

Perfect Writer, Perfect Filer, Perfect Speller, Perfect Calc are trademarks of Perfect Software, Inc.

Too hot to handle

Fire research and the Osborne 1

Denise Caruso

Fires are tricky subjects to study: those who get too close tend to drop their calipers and race to the nearest water faucet. In the past, fire protection research was often limited to less heated tactics, such as predicting possibilities and examining ashes. This of course, was before the computer—and before fire protections specialists such as Brady Williamson and his crew brought in cool electronics to deal with their hot subjects.

Williamson, a professor at the University of California at Berkeley, heads the staff of the Fire Research Laboratory in Richmond, a hands-on test facility for his classes in the Civil Engineering department.

"We burn things up," he said of the work done at the Richmond Field Station off Highway 17. And, simply, that is just what they do.

The laboratory consists of a smallish "room" made of inflammable gypsum wall board, and a larger hood and smokestack. Both are tucked in the back corner of a glass and steel building, which also houses monolithic stress-testing structures used in experiments by upcoming civil engineers. Even without the sign, one can guess what the "room" is used for—a charred cone above the door is a sure sign that many a flame has roared outward and upward during the many tests performed there.

Although not a university-organized research unit in the same tradition as UC Berkeley's Livermore nuclear weapons testing lab, the Fire Research Laboratory provides information to a number of government agencies. The National Bureau of Standards, according to Williamson, is one of the lab's more frequent clients as a seeker of information for fire codes and building standards. And recently Williamson and crew lit a trash fire in front of an electrical control cabinet as an experiment for the Nuclear Regulatory Commission. Members of the staff have even been called into private investigations such as the fire that recently rampaged through the Berkeley Hills.

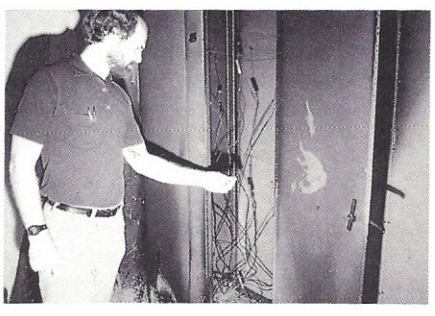
The center's versatility is at least partially attributable to its "staff" of computers. Housed there is an array of hardware ranging from Osbornes to a PDP 11 to the Nova II, which records data derived directly from the flames.

The Nova, programmed in Fortran, keeps Williamson and his team from relying on what he calls "ancient methods"—the manual notation of test conditions—for information acquisition. With a 100-channel capacity, the computer scores data from myriad heat-sensitive thermocouples wired throughout whatever type of compartment has been set afire. In addition, it scores from heat flux calorimeters which measure oxygen and gas flow in the smokestack. The computer then reduces the data and eventually compiles it into valuable graphs, which allows the staff to see exact changes that occurred during the course of the blaze.

This ease of data acquisition and compilation has made the computer a valuable team member. Traditionally, said Williamson, fire protection engineers such as himself work in groups of two or three within a larger professional setting. They've had limited access to computers, and have been forced to compile data manually and have it typed into reports. "Few firms computed at all," he said.

But Fred Fisher, developmental engineer and manager of the Richmond facility, has learned the value of the computer-processed page. "If we lost our computer we'd simply be out of business," he said. "It saves literally thousands of hours putting together reports."

The Nova, however, is by no means the only invaluable hardware at the Fire Research Laboratory. Two Osbornes are hard at work as well. Williamson bought his Osborne about a year ago, specifically for his work at the center. Fred Mowrer, an associate specialist in fire protection for the University, owns the other.



Although both have BASIC software in addition to the standard SuperCalc, they found the more complex program unnecessary.

"The big surprise for me was how much I could do with the spread sheet," said Williamson. "Why use BASIC if you don't have to?"

Mowrer, a beginner, agreed. After buying his Osborne only a few months ago to "be literate" with computers, he is working in SuperCalc on a variety of different projects, from setting up sprinkler systems by calculations of hydraulics and friction loss, to detailed studies of heat transfer in "post-flashover," the period just after a fire has involved the entire volume of a room.

"I like the idea of using microcomputers to do computations," he said. And for good reason: using such features as the lookup table, which can refer a cell to a different location, and the tab feature which can protect certain parts of his format, Mowrer is able to do in minutes what took hours of work as a graduate student.

"Every one of us did this by hand," he said, gesturing at his screen. "A sheet of paper looked like that and we had to keep referring to a table for the correct values. This is art."

The nicest thing about this kind of art, though, is its practical application. The casual Osborne owner in all probability wouldn't be interested in the specific calculations that Mowrer, Fisher and Williamson perform on their microcomputers, but engineer-types might find it behooves them to explore the possibilities of SuperCalc for whatever kind of problems they need to solve.

For example, even though fires are subject to many variables which include extreme fluctuations in temperature during what is called "pre-flashover," or the time during a fire when someone inside the room could still conceivably escape, Mowrer is debugging a program that can calculate assumptions about that phase based on the more uniform room temperatures that occur just after flashover.

So far, the pre-flashover factor itself can't be computed on the Osborne. "The variables are impossible to deal with," said Mowrer, noting that such a computation involves working in three dimensions. "It's been done on a PDP 11—the Harvard Fire Code—but it's really expensive. We haven't adapted that yet, not even on the PDP."

One thing he has adapted to the Osborne, however, is the set of calculations for setting up basic "Christmas tree' sprinkler systems, which like the name consist of a main trunk providing water to a series of branches. The problem is to ascertain what water pressure in the trunk will insure sufficient water pressure in turn to each of the outlets on the branches.

Williamson sees big possibilities for the Osborne in the field, when the company develops a data acquisition bank (like Isaac for the Apple) which would interface at the 488 port.

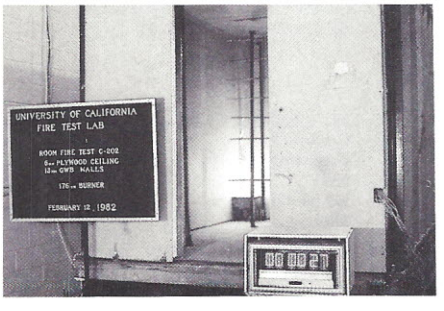
"In the field I have to resort to ancient methods—a person pushing a button and yelling 'Four hundred degrees!' while I look at my watch and write it down, '5 p.m., 400°,'" he said. "Data acquisition would be perfect for them (fire protection engineers)."

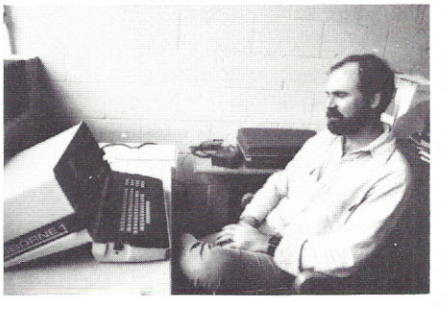
Williamson is also a fan of the Osborne because of its price, which he believes makes it more accessible for the small departments that need it. "For $1,800 (sic)," he said, "they can almost buy one out of the petty cash drawer."

Greater accessibility would be a boon to all concerned, providing a greater capacity for on-site research and allowing field engineers to give additional valuable data to facilities like the one in Richmond.

The goal of this research is, of course, to prevent fires. And by being more able to predict a fire's behavior under given circumstances, fire protection engineers will be more able in turn to provide solid information to both builders and those devising construction standards which help keep buildings safe.

"Ideally," said Mowrer, "we'll be able to set up protection systems tailor-made. And because of computer exactitude, we can devise building codes based on a better understanding of fire phenomena."





The Strobe Graphics System: $795. You can pay more but you can't buy more.

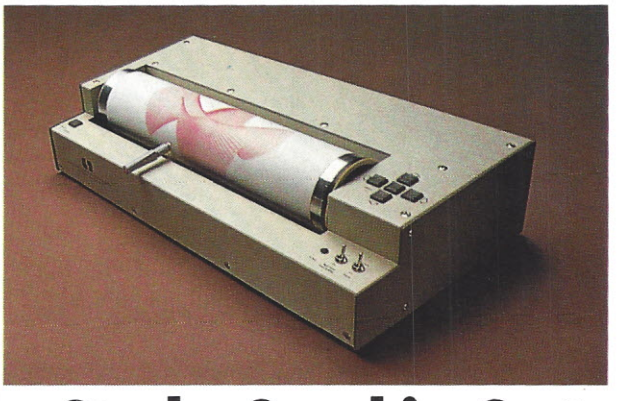
How to chart your company's fortune without spending one. It's a fact. A single chart or graph can tell you instantly what it takes hours to interpret from printouts or other raw data.

Now, with the Strobe 100 Graphics Plotter and Software package, you can create superb hardcopy graphics directly from your computer. And you can do it for a cost of only $795.00.

The Strobe System transforms complex data into dynamic, colorful visuals with a few simple commands from your computer. Charts and transparencies that once took hours to produce are plotted within minutes. Information can be presented as bar charts, pie charts, curves or isometrics in a variety of colors. And with a resolution of 500 points per inch, the Strobe 100 matches or surpasses the quality of plotters costing thousands of dollars more.

You can also save and modify your graphics through Strobe's menu-driven programs. A broad selection of software is now available.

When the Strobe Graphics System is interfaced to your computer, an 8½ x 11 inch sheet of paper can speak anyone's language—visually. Visit your local dealer and learn how to start charting your fortunes today. Because a perspective on the present can also be your window on the future.



*For Apple, Osborne and Commodore computers. For serial interface, add $100.00.

I.R.E.T. INFORMATICA SPA
Via Bovio 5
42100 Reggio Emilio
ITALY
Tel. 52-2-32643
Telex No. 530173

PRESIDENT OFFICE MACHINES
Rea 100 George Street
Hornsby NSW 2077
Australia
Tel. (02) 476 2700
Telex No. 24527

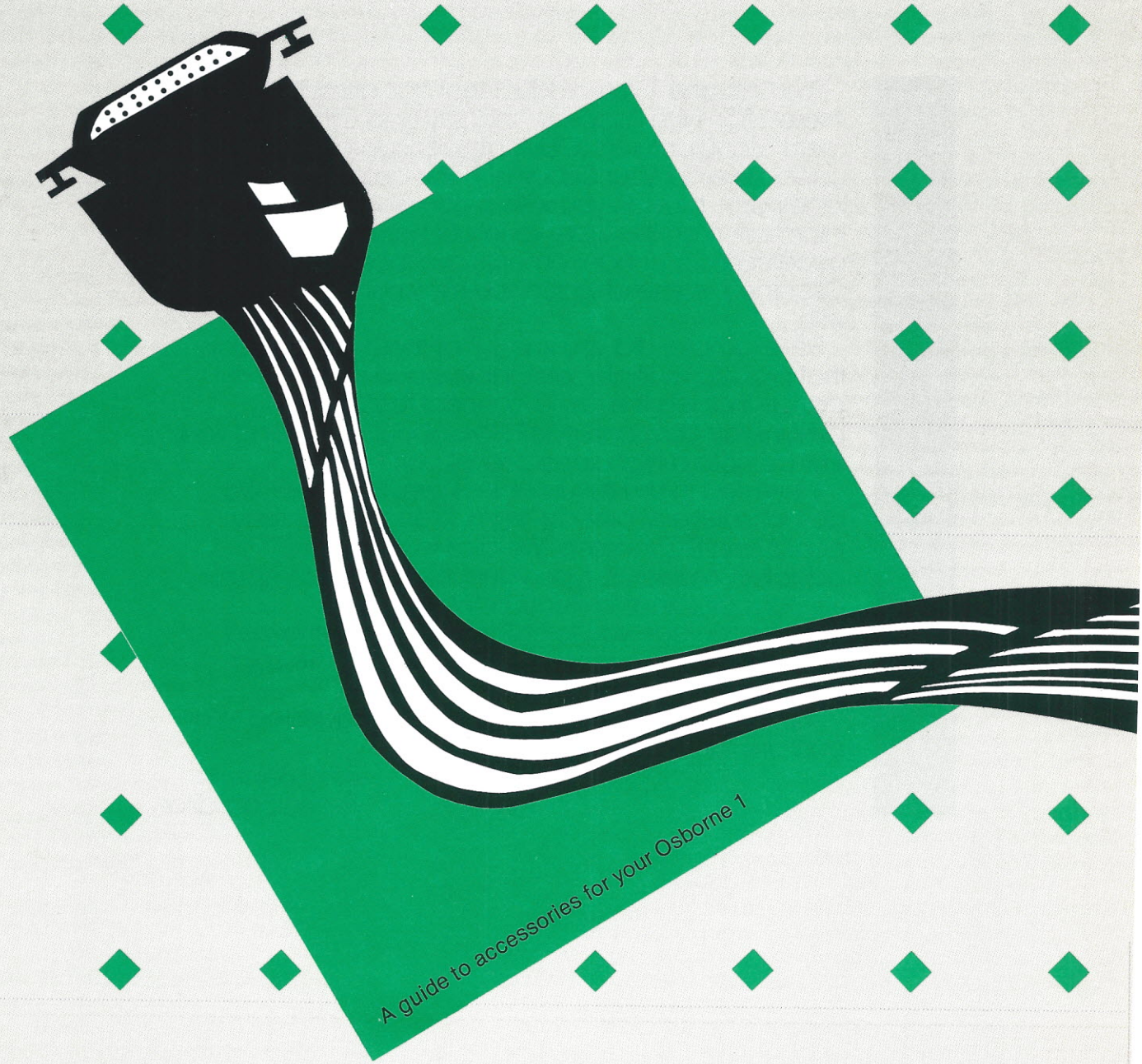
JMM ENTERPRISES
115 Battersby Street
Enumclaw, WA 98022
Tel. (206) 630-1991

DAVID JAMISON CARLYLE CORPORATION
2049 Century Park East
Los Angeles, CA 90067
Tel. (213) 277-4562

The Strobe Graphics System

Seeing is believing

ACCESSORY CATALOG



A guide to accessories for your Osborne 1

The Osborne 1 is a product that has attracted a lot of interest from the "add-on" industry and Other Equipment Manufacturers (OEMs) resulting in greater capabilities for your Osborne 1. This catalog was put together to provide you with a convenient resource for information on the wide variety of hardware accessories & enhancements available for the Osborne 1, some of which you may not be familiar with.

For example, did you know that there are products that provide multiple selectable baud rates? Or a device that lets the Ozzie connect to 2, 3, or 4 peripherals from one port? How about converting your IEEE bus into a high speed serial port?

Interested in Uninterruptable Power Supplies? We describe several other of them, along with battery packs and DC inverters. We also look at video adapters, modems, typewriters interfaces, computer furniture, plus several items of interest.

We encourage you to call or visit your authorized Osborne dealer as some of the products are sold through the dealer network.

The prices given in this catalog are suggested retail and are subject to change.

–Brad Baldwin
Technical Editor

ACCESSORIES

MODEMS

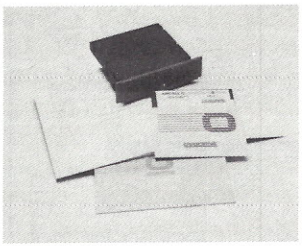
The addition of a modem to your system opens the doors to unlimited opportunities. For example:

- Newspapers, magazines, and independent news services are beginning to encourage and accept articles submitted from outside sources by modem.
- Sophisticated data bases and information networks are available by modem from several major organizations.
- Public access bulletin boards are springing up all over providing a network for friendly exchange of information with other users. These same bulletin boards usually have extensive libraries of free public domain software.
- Simply sending or receiving information for whatever the reason. Send urgent files to the branch office across the country; exchange your MBASIC programs with a friend across town; or tie into a college's mainframe computer system from your home.

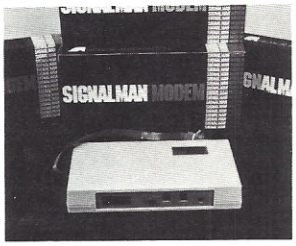
Osborne's COMM-PAC modem is a 300 baud, auto-dial, auto-answer unit that fits into the left-hand diskette storage pocket and operates from the MODEM socket. (Connecting to the modem port frees your serial RS232 port for printers.) With the modem comes the **AMCALL** communications software package. It is preconfigured for the Osborne, and requires no understanding of communications or programming to install. Some of the operating features of AMCALL are:

- time sharing terminal emulation–the Osborne can act as a terminal communicating with a mainframe
- bidirectional file transfer between the Osborne and time sharing computers
- error free file transfers between computers
- ASCII and non-ASCII file transfer

Included with COMM-PAC is a free trial subscription to The Source and Dow Jones. Price: $265.

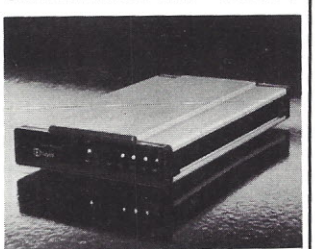


The **SIGNALMAN MARK V** modem by **Anchor Automation** is also designed for the Osborne MODEM port. It is a direct connect, 300 baud, automatic answer/originate unit that runs on a 9 volt battery or a 110 VAC adapter (not included). The **Computer Cannery** of San Jose has advertised it at $129.95.



If 1200 baud modems are what you are looking for, then check out the **Novation 212 AUTO-CAT 1200**

or the **Hayes SMARTMODEM 1200.**



They share similar features: auto answer, auto dial/originate, auto disconnect, direct connect, and manual operating modes as well. They use the RS232 port and an external AC power source to operate on. These sophisticated modems are priced at around $600 to $700

REFERENCE CHARTS

Tired of fumbling through the menus or manuals looking for that certain WordStar or dBASE II command? Well, hunt no longer.

Creative Computer Products has designed a plastic **template** with printed program commands that fits onto the keyboard. The template is color coordinated and designed to fit either the beige or blue/grey case. SuperCalc and MBASIC templates are also available. Price: $19.95.

Kara Enterprises offers a different approach to the problem on having WordStar commands at your fingertips. They manufacture a WordStar **Quick Reference Card** that contains the editing, dot, and no-file commands. These are organized, classified, synoymized, indexed, and cross indexed with references to the appropriate pages in the new Osborne **User's Guide.** There are over 60 headings with a total of 216 entries all fitting onto a card the exact size of a diskette. The recommended retail price is under $2.50 and is sold only through Osborne dealers.

VIDEO ADAPTERS

Composite video adapters enable the use of any standard video monitor with the Osborne 1. They plug directly into the Ozzie's external video jack–replacing the video "dummy" plug–and require no modification at all. Video adapters will generally drive bridging, loop thru, or 75 ohm terminated inputs. That means you can use more than one monitor at a time, and the Osborne internal monitor remains functional. This is ideal for group demonstrations where the instructor requires the vision of the screen as does the audience. Manufacturer, product, and price:

JMM Enterprises, EX-MON, $39.95

Rocky Mountain Data, OZMOD, $39.95

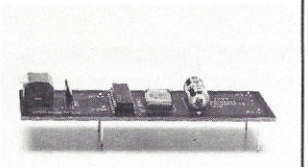
Integrated Systems, CVA-1, $34.95.

(Interested in using a TV off of the Osborne? Contact JMM or Rocky Mountain Data for further information on RF modulator products. The visual quality is generally not as good in comparison to video monitors.)

SWITCHABLE BAUD RATES

How would you like your Osborne 1 to communicate serially at 19200 baud? 50 baud? 9600 baud?

With **Advent Product's OSBAUD** device, you can easily select any of those rates plus 13 others in between. The applications for the OSBAUD are many. Transferring files at 19200 baud between computers is 16 times faster than using 1200 baud, without compromising reliability. High speed serial printers are not high speed unless the information goes to the printer faster than it prints.



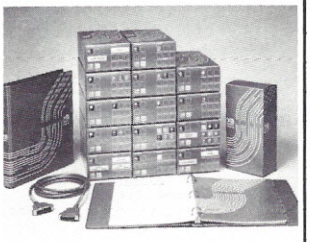
At the other end of the spectrum is the occasional need for slower baud rates. For example, most teletype machines operate at 110 baud; OSBAUD enables the Osborne to talk to these snail slow devices.

OSBAUD is attached inside the computer, so some technical competency is required. Price: $59.95.

The **TNW Corporation's** approach to driving serial devices at different baud rates is different than that of Advent's. Their completely external device uses Osborne's IEEE-488 port and converts the signal to RS-232 standard. Because the IEEE port provides for faster data transfer than the serial port, TNW is able to control the baud rate over the range of 110 to 9600. Call or write TNW for prices and further information.

CABLES

Designing and building your own printer cable is no longer necessary. Most Osborne Authorized Dealers have a supply of ready-made serial and Centronics cables, or will custom design and configure one for you. In addition to your dealer, there are at least six companies that sell by mail order (some distributing their product direct to the dealer):



- **The Computer Cannery**
- **Computer Accessories Corporation**
- **JMM Enterprises**
- **Rocky Mountain Data**
- **Sudden Products Group**
- **The Bottom Line**

Again, check with your dealer as these products may be available right off of the shelf. Prices will vary depending upon configuration, length, and printer type.

DATA BUFFER

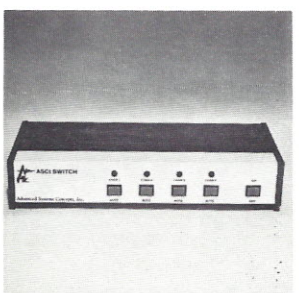
What's a data buffer, you ask? It's simply a storage device that speeds up the transfer of data between your computer and printer or modem. By loading the files quickly into a large buffer, printer and computer efficiency are both realized. A file can be down-loaded from the parallel port to a printer buffer in a matter of seconds immediately freeing the computer for other tasks. Meanwhile, the printer goes about its business printing the file.

The **PRINTER OPTIMIZER** made by **Applied Creative Technology, Inc.** provides a 64,000 to 256,000 character memory buffer. A whole double density diskette can be put into the Optimizer's buffer! The Optimizer can also be used to convert data, send control sequences, pause on cue, and access special printer functions merely by pushing the proper buttons on its keypad. Additional information and prices are available upon request by writing or calling Applied Creative Technology.

PORT EXPANDERS

How do you connect a letter quality printer, a dot-matrix printer, a modem, and a plotter to your Osborne 1...without fumbling with cables? Or, how do two Ozzies use the same modem or printer–again without switching cables back and forth?

As you may have guessed from the heading of this section, the answer is "port expander."



Up to four serial peripheral devices are connected to **Advanced Systems Concept's ASCI QUAD SWITCH.** This device accepts data and distributes it to one of four output ports. All of this can be done without changing software or hardware by embedding codes in the text.

The two port **ASCI SWITCH,** also designed by Advanced Systems Concepts, enables two computers to share a single printer or modem–without the hassle of changing cables, or turning knobs. (A recent press release announced a **Model MO11** four port device.) Prices and further information are available from the manufacturer.

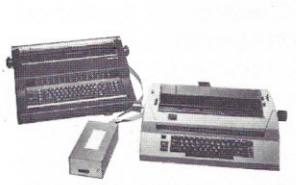
TNW Corporation–experts on Osborne's IEEE 488 hardware and software–have developed a unique product. The **TNW-2000 Serial Interface** module is an external box that operates from the IEEE 488 port, and interfaces to both serial and parallel peripherals. The TNW-2000 controls the baud rate over the range of 110 to 9600 baud.

It also has two IEEE ports and one serial port, allowing "daisy-chaining" of serial devices, if several TNW units were purchased. (Switches select the bus address. Or, use Osborne's new SETUP program to set the device address.) The TNW-2000 comes with a manual, technical notes, and cable. Price: $229.

TYPEWRITER INTERFACES

Developing custom interfaces for typewriters has become quite a growth market. The reasons are simple: 1) Typewriters have keyboards. For a lot of reasons, having a keyboard on a printer is useful. Sometimes, one may want to pound out a quick note without going through the WordStar process. 2) Typewriters are already in the market. Someone purchasing a computer may not want to buy a printer if they already have a $2000 typewriter. 3) Up until recently, letter quality printers were expensive; converting your typewriter to a printer made sense.

Escon Products Incorporated has designed interfaces for IBM Selectrics I, II, and III. It does not change the appearance of the typewriter, nor does it affect the manual operation or alter key touch. There is no permanent modification of the typewriter and IBM warranty or service is not affected. The custom designed electromechanical unit fits precisely into the Selectric's chassis. Solenoids utilize 32 volts for actuation from the electronic interface.



The price is $840 (includes factory installation and all options wired).

Three companies supply IBM Electronic Typewriter 50, 60, and 75 interfacing: **Escon, Applied Creative Technology, and Wholesale Suppliers.** Prices range around $400-$450.

Wholesale Suppliers has advertised $395 interfaces for Adler-Royal, Olympus, Brother, Silver-reed, and Smith-Corona. Escon makes an Olivetti 121 and 221 interface.

The hottest low-cost electronic typewriter on the market today is the **Olivetti Praxis 30** and **35.** For under $750 you can get a letter quality, daisy wheel typewriter that is light-weight and portable (22 lbs), although slow. (Runs at 12 cps.)

Some of the Praxis's features are worth noting:

- automatic correction tape (uses the IBM correcting tape)
- alternate keyboard selection to choose foreign characters
- automatic repeat of last key entered
- 10, 12, and 15 pitch selection
- express backspace

plus several other sophisticated abilities as well as standard typewriter features.

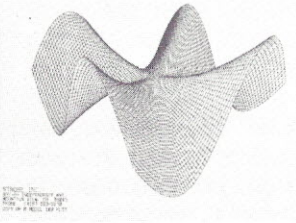
Olive Branch Association's OLIVE-1 serial interface is contained outside the Praxis while **Selectone Corporation's MICRO-TYPE** interface connects directly inside the printer. Selectone offers both a serial and parallel package.

Prices: (Olive Branch OLIVE-1, $249; Praxis 30 and factory-installed interface, $749.

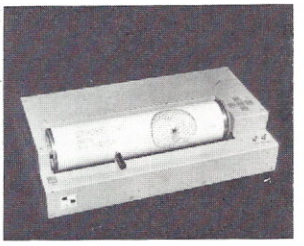
(Selectone) MICRO-TYPE, $195; Praxis 30 and factory-installed interface, $695. $795 for the Praxis 35.

PLOTTER

Anyone who has seen the colorful **STROBE Graphics System** ad probably already knows what a plotter is and does. Briefly then, the Strobe plotter is an excellent tool for visually communicating normally boring and non-descript data. Dull facts come to life when written on a multi-color pie or bar chart. Also, the Strobe plotter is an educational and artistic tool; some of the isometric plots drawn from complex mathematical equations are both beautiful and fascinating.



The business graphics software package comes with line, bar, and pie chart programs, and sells for $145. Plot applications software (line and lettering) costs $70. A parallel interface is standard; RS-232 interfacing is priced at $95. The plotter itself has a suggested retail price of $795. (The Strobe plotter was profiled in the August/September issue of **The Portable Companion.**)

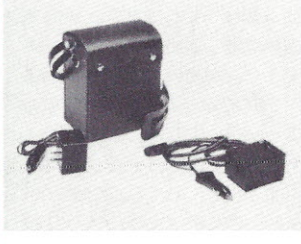


BATTERY PACKS & UPSs

The Osborne 1 portability concept is exemplified through the use of a battery pack. The Ozzie is set free from the wall socket allowing you to create and compute in the most remote locales.

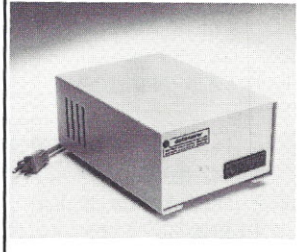
Uninterruptable Power Supplies (UPS) are special safeguards that protect your data against unexpected power failures and voltage drops.

Osborne Computer Corporation's POWR-PAC is a rechargeable 7 lb battery pack that runs your Osborne for a minimum one hour. POWR-PAC is connected directly to the 110 volt AC plug. Using the DC power inverter included with POWR-PAC lets you take your Osborne on the road by plugging into the car's 12 volt DC cigarette lighter (providing hours of use). Everything stores easily in a leatherette case. Price: $345.



The **BITS (Burns Industrial Technology Service, Inc)** 13 lb battery pack provides 3-4 hours of power to the Osborne 1, and operates as an UPS with the optional regulated power supply. BITS plugs into the front battery port, thereby eliminating the computer's power supply. Other features are the auto cigarette jack, and battery status monitoring system, and leather-like carrying case. Price: BITS, $295; UPS regulated power supply, $75.

Cuesta System's DATASAVER is a self-contained battery powered AC backup unit (UPS) that switches on within 1/100th of a second upon loss or drop of line power. A front panel indicator light–as well as buzzer alarm–indicates that the DATASAVER is operating from its battery system. If operating at full rated output load, DATASAVER will supply up to 5 minutes of power–enough time for you to save your files before total AC power loss occurs. DATASAVER comes with an automatic battery charger. Price: 90 watt model, $395.



A new battery pack and UPS on the scene is **Gamma Research's FIREFLY.** The press release for this product states that it will provide 5-6 hours of battery power and connects to the front battery port, like the BITS battery pack. All components and acessories can be carried in one case, and

automatic LED monitoring and charging is provided. The UPS is optional and so is a booster battery pack providing up to ten hours of power. Prices: FIREFLY with charger, $178; UPS, $74; Ten hour booster pack, $80.

DUST COVERS

If your Ozzie resides at one location on a more-or-less permanent basis, you may be interested in purchasing a dust cover. Of course, the keyboard could be latched back onto the computer; however, you may not want to fuss with disconnecting the printer or external monitor cables.

SGW Enterprises ONTOP dust cover fits over the external monitor and the Osborne 1 (as long as the combined height does not exceed 22" high and the width of the monitor top does not exceed 14½"). It is made with anti-static heavy guage stitched vinyl. Price: $15.95.

Creative Computer Products, B.L.&W, and **SGW** make "stand-alone" computer covers if there is no external monitor. Prices are around $15.

CARRYING CASE

A carrying case for a computer that already has its own built in handle and case may seem rather odd. However, you may not want the case of your Osborne getting scuffed and marred. Also, a carrying case gives you the added convenience of easily transporting manuals and other reference material.

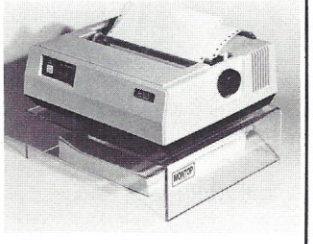
Desert Computer Product's DESERT CASE comes in either vinyl or leather, prices $57.95 and $99.95 respectively. **Westwind's OZGUARD** case costs $60. **JMM Enterprises** has one for $59.95.

TABLETOP PRINTER STANDS

Where do you store the form feed paper for your Epson? On the floor? Jammed behind the printer? By elevating the printer on a stand, the paper can be stored and fed from below.

Apogee Design's stand allows four inches of paper to be stored underneath the printer (Epson MX-80, Okidata 82A, NEC 8023 or similarly sized printer), and has a built-in shelf providing space for manuals. Price: glacier white or basic black, $27.50. (Apogee's computer stand described below may be used as a printer stand for the longer light-weight printers.)

SGW Enterprise's 4" high **MONTOP** printer stand comes in two sizes: 14" × 13" or 20" × 13". The larger size is able to support the Epson MX100 or Okidata 83A comparably sized printers. Prices: $29.95 and $34.95.

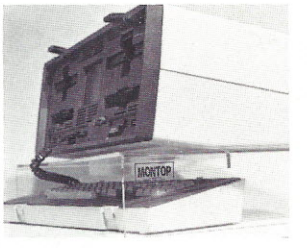


COMPUTER STANDS

Computer stands are additional space-saving products. A stand elevates the computer for better screen viewing. The new-case keyboard slides underneath when not in use leaving extra space on desk or table. (Or use the space for storage.)

SGW Enterprise's DOUBLE DECKER is a reinforced plexiglass stand priced at $34.95.

Apogee Design's stand, like their printer stand, has a built-in shelf keeping manuals and supplies within easy reach. Price: $29.50.



DISKETTE STORAGE

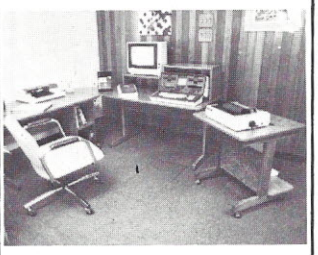
There are many floppy diskette storage units on the market, but perhaps none quite as elegant as **FLOPPY DRAWERS** manufactured by **Venice Woodworking Company.** Hand-crafted of quality solid ¾" oak with a hand-rubbed oil finish, the units feature contemporary modular design and a fastening system to make assembly quick and easy while allowing disassembly for rearranging and adding new modules.

Each Model F203 unit contains one random access drawer that pulls out and then drops down to an inclined position enabling the user to

select any one of up to 20 diskettes at a glance, with each label visible. Beneath this drawer are 2 bulk storage drawers containing four compartments. Each drawer holds 160 diskettes, so the entire FD203 unit holds 340 diskettes total. This unit is designed to function either individually or as the starting point for a larger configuration with the addition of any number of FD203A modules. Price: FD203, $279.95; FD203A, $239.95.

COMPUTER FURNITURE

The development of specialized furniture for computers and related products is a whole new growth market. More and more people are sitting at desks...with computers on them. Most furniture is woefully inadequate for computer use–the desk is too high...there is no place to put a monitor...printers compete for work space ...hard disks sit on the dusty floor...and your computer program listings snake up and over it all.



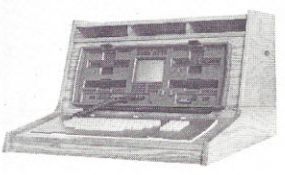
Enter the furniture designer/manufacturer. **The Wood Works** furniture set is functional and handsome. The different types of work stations shown in the picture are made from oak veneer with solid wood legs. Matching stands for monitors, shelves for hard disks, and stand-alone moveable printer tables are additional pieces in their set. The design is clean and simple–the most expensive piece costing only $200 (Cherry and walnut optional.)

Williams & Foltz computer furniture is solid oak with quality features such as fingerjointed tops, rounded corners and edges, and hand-rubbed finish. The unique **"Keyboard Cart"** may be fitted with a pull-out breadboard for Ozzie's detachable keyboard so it sets at typing height. Hard disk storage units or drawers may be fitted to any of the work stations. Prices range from $290 for a printer cart to $685 for a fully loaded **"Work Station 6."**

Although the Osborne 1 is a portable computer, many times it's used in one location only. With that concept in mind, the **OZZIE HOME** was developed. It's an oak veneer cabinet that the Osborne 1 drops into. Features include:

- level top for use with optional monitor
- ventilation back and bottom
- lighted on/off switch on the side
- simple assembly
- diskette storage compartments above computer
- 45 day money back guarantee

Available from **Roth Wood Products, Ltd.** for $195.



MANUFACTURERS

Advanced Systems Concepts
P.O. Box Q
Altadena, CA 91001
(213) 794-2308

Advent Products, Inc.
965 N. Main St.
Orange, CA 92667
(714) 997-0800

Apogee Designs, Ltd.
3100 Fallscliff Rd.
Baltimore, MD 21211
(301) 235-7523

Applied Creative Technology, Inc.
2723 Avenue E. East,
Suite 717
Arlington, Texas 76011
(817) 261-6905
(800) 433-5373

BITS
6456 Danbury
Dallas, TX 75214
(214) 361-4815

The Bottom Line
Elm Street
Milford, NH 03055-0423
(603) 673-8857

B.L.& W.
P.O. Box 381076
Memphis, TN 38138
(901) 754-4465

Computer Accessories
10343 Roselle Street
San Diego, CA 92121
(619) 450-0852

Computer Cannery
P.O. Box 23425
San Jose, CA 95153
(408) 226-3184

Comsol
P.O. Box 206
Pt. Richmond, CA 94807

Creative Computer Products
P.O. Box 85152 MB 134
San Diego, Ca 92138
(619) 268-0793

Cuesta Systems, Inc.
3440 Roberto Court
San Luis Obispo, CA
93401
(805) 541-4160

Desert Computer Products
2304 N. Kachina
Chandler, Arizona 85224

DIPCO
1900 East 12th Street
Oakland, CA 94606

Easy View
P.O. Box 20595
Portland, Oregon 97220
(503) 256-4244

ESCON Products, Inc.
12919 Alcosta Boulevard
San Ramon, Ca 94583
(415) 820-1256

Gamma Research
6253 Hollywood Blvd.
Suite 711
Los Angeles, CA 90028
(213) 463-2345

HAYES Microcomputer Products, Inc.
5835 Peachtree Corners
East
Norcross, Georgia
30092
(404) 449-8791

Integrated Systems, Inc.
125 Sharon Avenue
Houghton, MI 49931
(906) 482-2305

JMM Enterprises
115 Battersby Street
Enumclaw, Washington
98022
(206) 835-1637

Kara Enterprises
245 Daytona Dr.
Goleta, CA 93117
(805) 685-2245

Novation, Inc.
18664 Oxnard St.
Tarzana, CA 91356
(213) 996-5060

The Olive Branch Association, Ltd.
26291 Production Ave., Suite 205
Hayward, CA 94545
(415) 887-5633

Rocky Mountain Data
9004 Menaul, NE
Albuquerque, New Mexico 87112
(505) 294-8856

Roth Wood Products
2260 B. Canoas Garden Road
San Jose, CA 95125
(408) 723-0330

Selectone
28301 Industrial Blvd, Suite L
Hayward, CA 94545
(800) 227-0376 (Outside CA)
(800) 421-5389 (Within CA)

SGW Enterprises
P.O. Box 1015
Del Mar, Ca 92014
(714) 755-8324

STROBE
897-5A Independence Avenue
Mountain View, CA 94043
(415) 969-5130

Sudden Products Group
1512-C Pualele Place
Honolulu, HI 96816
(808) 735-1955

TNW
3444 Hancock Street
San Diego, CA 92110
(714) 296-2115

Venice Wood Working
12810 Venice Blvd.
LA, CA 90066
(213) 390-4885

WESTWIND
484 Lakepark Ave., No. 141
Oakland, CA 94610
(415) 839-7169

Wholesale Suppliers
P.O. Box 22428
Carmel, CA 93922
(408) 373-0320

Williams & Foltz
1816 Fourth St.
Berkeley, CA 94710
(415) 644-2022

The Wood Works
11th & Haskell Rt. 2 Box 407
Lawrence, KS 66044
(913) 842-7797

NOTE: The prices listed in this Buyer's Guide are suggested manufacturer's retail prices for single unit purchases and may not reflect the true consumer list price. Computer retailers or peripheral distributors buy in bulk quanitites and often receive discounts from the manufacturer; these savings are normally passed along to the consumer.

We suggest that you check with your favorite computer store or peripheral outlet before judging a product based on price alone.

DOUBLE DENSITY
UPGRADES FOR THE OSBORNE1*

*OSBORNE 1 is a trademark of the Osborne Computer Corporation.

OSMOS IV
Winchester disks. Expand your capacity to unprecedented levels! Available in 5¼, 10½, 15¾ & 21 MByte units — a 42 Megabyte max. capacity!
from $2475 to $3650

OSMOS III
Double-sided Double Density/Double Tracking
Replaces both drives with CDC Double-sided Double Density/Double Tracking drives. More than 1 Megabyte of portability!
$1495

OSMOS II
Double-sided Double Density. Replaces one or both drives with CDC double-sided Double Density drives. Can still read Osborne Single Density disks.
$335 plus $375 per drive. (If you replace one drive, you still get single-sided DD on the other).

OSMOS I
Single-sided Double Density. Uses existing drives and disk controller. Can still read Single Density Osborne disks.
$195 Install it yourself and save $100 on Osborne's charge!

OSMOSIS upgrades are supplied as kits for existing units. There is a piggyback disk expander board which fits onto the main Osborne electronics board. Quick, easy assembly instructions are provided.

Send checks and money orders to:

OSMOSIS

A more concentrated solution

Suite 6, 1554 Market Street, San Francisco, CA 94102. (Tel.) 415 864-6372

ADD 2.5% OF TOTAL ORDER VALUE FOR SHIPPING.

CALIFORNIA RESIDENTS ADD 6½% SALES TAX.

OSMOS is a trademark of OSMOSIS, a division of COMPU-LINE CORPORATION.
Purchase and installation of the items advertised may void the warranty on your Osborne computer.

Tax deductions on your computer

How to write off trade and business uses

Guy M. Wong

Generally, in order to take a tax deduction on your Osborne 1, you must be able to prove that the use of your computer and related software:

1. Is connected with your trade, business or profession, and
2. Meets the "ordinary and necessary" test.

Unless all or part of the costs relative to use of the computer are reimbursed, or you are an outside salesman, the deduction should generally be treated as a miscellaneous deduction in Schedule A of your Form 1040. Therefore, you are out of luck if you use the short forms (Forms 1040A and 1040EZ).

The performance of services as an employee is a trade of business. Therefore, if you use your computer in your work, whether in the office or at home, you meet test number one.

An expense is "ordinary" if it is customary or usual in your field of business. In a Supreme Court decision it was held that an expense is "ordinary" if it can be expected to arise with some degree of constancy in the particular business; cautioning that the expenses need not be habitual or normal in the sense that the taxpayer would have to make them often.

A "necessary" expense is one which is appropriate and helpful in developing and maintaining your business. It need not be essential or indispensable. Usually, your judgment as to what is necessary will be accepted. Expenditures are deductible as ordinary and necessary even if they turn out to be unwise.

How Much Can I Deduct?

You may deduct the amount paid during the taxable year that qualifies under the two tests. Under the Economic Recovery Tax Act of 1981, Section 179 of the Internal Revenue Code was amended to allow taxpayers to treat the cost of qualifying property as an expense rather than a capital expenditure. This Section 179 deduction is limited to $5,000 in 1982, increased to $7,500 in 1984 and $10,000 in 1986 and thereafter. Most Osborne owners deduct the entire portion of the cost relative to business use.

If you choose to capitalize your Osborne 1 and take depreciation expense, you will depreciate the Osborne over a five year period (unless the computer is used in research and experimentation, in which case, three years). During the five year period, you may depreciate the qualifying cost of the computer at the following percentages:

Year	Percent
1	15
2	22
3	21
4	21
5	21

For many microcomputer owners, the computer is not used exclusively for business. In that case, the amount of your miscellaneous unreimbursed employee business expense is limited to the percentage of business use. The only tax deductible portion for personal use occurs if you use the computer to keep track of your personal income and deductions for preparation of your income tax return. For example, you bought your Osborne 1 for $1,795 and spent 40% of the computer time for business use, 10% of the computer time for tax perparation purposes and the remaining 50% of the time for other personal use. Then 40% or $718 qualifies as a miscellaneous business deduction and 10% or $179 qualifies as miscellaneous tax perparation deduction. The remaining 50% of the time is not deductible.

Do I Get Investment Tax Credit?

Qualified equipment used in a trade or business that is capitalized and depreciated over a five year period qualifies for a 10% investment tax credit (6% for three year property that is used in research and experimentation). Using the same example, if you capitalize your Osborne 1 and 40% is for business use, then $718 qualifies for the 10% investment tax credit, you can subtract $72 from your income tax liability on line 41 of Form 1040, and depreciate the $718 over a five year period. You must, however, use Form 3468 to calculate the amount of investment tax credit.

Effect of New Tax Law

The Tax Equity and Fiscal Responsibility Act of 1982 reduces certain business incentives if the computer is placed in business service after December 31, 1982. In 1983 and thereafter, you will have to reduce the 10% investment tax credit to 8%, or reduce the depreciation basis of $718 by one-half of the amount of investment tax credit taken ($36) to $682. The new tax law has no effect on computers placed in service before 1983.

The above discussion is a brief overview of the deductibility of use of your Osborne 1 at work, for federal income tax purposes. It should be used only as a reference for discussion with your tax advisor. The decision as to whether you should take a deduction should be made jointly by you and your tax adviser. *(Mr. Wong is a certified public accountant with Gordon, Odom, Davis, Olin & Wong, in Sacramento, California.)* ◻

Form 1040 Department of the Treasury—Internal Revenue Service U.S. Individual Income Tax Return 1982

For the year January 1–December 31, 1982, or other tax year beginning

Use IRS label. Otherwise, please print or type.

Your first name and initial (If joint return, also that spouse's name and initial)

Present home address (Number and street, including apartment number, or rur

City, town or post office, State and ZIP code

Presidential Election Campaign

Do you want $1 to go to this f
If joint return, does your sp

Filing Status

Check only one box.

1 Single
2 Married
3 Marr
4
5

Exemptions

Always check the box lab
Yourself
Chec
b

NOW, A NEW SELF-TEACHING PERSONAL INCOME TAX PREPARATION SYSTEM FOR YOUR OSBORNE COMPUTER

HomeTax™
by Learning Shack™

Here's how you can get the first self-teaching personal Federal Income Tax preparation system for your home computer featuring AutoLearn™.

Prepare Your Tax Returns with HomeTax™

Imagine how easy it will be to prepare your 1040 Income Tax Return on your own computer using the Learning Shack™ HomeTax™ system. You don't have to be a tax expert and you don't need to purchase tax books or pay outside tax preparation fees. You don't even need a documentation manual with your HomeTax™ system because the user-friendly program will ask you all the questions that the professional tax preparer would ask, right on the CRT screen! You simply enter the answers and the program goes to work for you. It uses your computer to process the information and print the completed return on plain paper. A special 1040 transparency is included with the program which is placed over the printout and your finished tax return is made on a copy machine ready for your signature.

Your Personal Tax Planning System

In addition to helping you prepare your income tax return, your HomeTax™ program can be used in a "what if" mode to help you with tax planning. A "Tax Planning Strategies Manual" that you can use to project the tax consequences for different situations is included with your program. This can save you many times the cost of the HomeTax™ System!

Your HomeTax™ program is also compatible with another user-friendly system available from the Learning Shack™ called HomeRecord™ — a system that allows you to record current expenses throughout the year and provides you with monthly financial information which automatically flows into the HomeTax™ system at the end of the year.

A Toll-Free Number to Answer Your Tax Questions

When you use the HomeTax™ system, you get more than a computer program. You get a complete tax service! If you have any questions regarding the preparation of your income tax return when using the HomeTax™ system, just give us a call. Our technical staff will be on hand to answer any tax questions you may have. In addition you will receive periodic news releases concerning important changes in the tax laws.

What About Next Year?

Every year there are revisions in the tax laws. Learning Shack™ will provide you, for a nominal charge, with annual renewal diskettes to update your HomeTax™ system which will reflect these new tax laws.

Your Computer System may be Tax Deductible

Your HomeTax™ system is tax deductible. Also, if you plan to purchase your computer system in 1983, you may be able to write off a substantial part of the entire system if it is used for assembling data and preparing taxes. Included with your HomeTax™ system is a description of many tax deductible uses for your computer.

Hardware Requirements

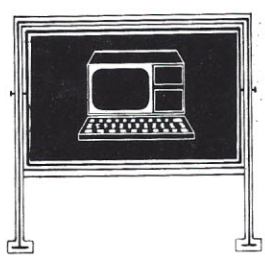
HomeTax™ runs on most CP/M computers with dual disk drives and with at least 48k RAM. (Apple II requires Softcard.) Contact us if you have any questions regarding compatibility with your system.

Order by Mail or by Telephone!

Order your HomeTax™ system today! The price is only $95.00 plus $2.00 for shipping and handling. Remember, you can deduct this amount from this year's taxes if you order now before the end of the year! The time and taxes you save may even pay for the entire cost of the system!

To order by telephone call (800) 782-8678. (In California call (714) 966-6631.) Use your Master Card or Visa (we need your card number and expiration date).

To order by mail please enclose your check for $95.00 (California residents add 6% sales tax) plus $2.00 shipping and handling. Send payment to:



Learning Shack™ inc.

17981-J Sky Park Circle
Irvine, California 92714

DEALER INQUIRIES INVITED.

Osborne 1 is a Trademark of Osborne Computer Corporation
CP/M is a Registered Trademark of Digital Research Apple is a Trademark of Apple Computer, Inc.

Double trouble or value

Do two salaries really add up to more?

Harry V. Mease

(For those readers who are unfamiliar with random access files, Mr. Mease's program provides an excellent working example on how they can be used. We also include a sidebar that briefly explains the various elements of creating and accessing random files. So even if the "two salary" situation does not apply to you, check this program out for its educational content.)

Married couples: Do you have more money to spend when both of you are working for a salary? One usually assumes that two incomes are better than one; however, the added costs of child care, restaurant meals, travel expenses, and other items may reduce or nullify any actual financial benefits derived from a second income.

The calculations necessary to answer this question are tedious and become quite laborious when trying to compare several different situations. The following MBASIC program makes the task much easier.

Money you spend for taxes and expenses, including those associated with a second salary, are not readily available to spend as you desire. The money left over after taxes and expenses is referred to as "expendable income" and is expressed in this program as "Monthly Income Apparently Not Committed." The term "apparently" is used because this figure represents a "best guess situation," based on your best projection of estimated future expenses and income.

The figures following "Monthly Income Apparently Not Committed" are calculated to reflect expendable income from one and then two salaries. This comparison aids in assessing the dollar advantage or disadvantage of a second salary.

The program assumes housing costs are rental rates, and the standard deduction (Zero Bracket Amount) built into the Tax Table is used. Therefore, a couple could enjoy more expendable income if they are buying their home and if their itemized deductions exceed $3400.00 for 1982 Income Tax purposes. Assuming, of course, that their taxable income is below $50,000.00 per annum.

Should itemized deductions be a factor, you should subtract $3,400.00 from your total itemized deductions. The balance is then subtracted from any figures (or zero) in the program's "Other Income Per Annum." Use a negative figure if the result is negative and place in the program's "Other Income Per Annum" to obtain a better approximation in this situation. State and/or City income taxes were not included in the program, but should be considered.

No liability is assumed for any errors in this program or for the tax data used. Additionally, some assumptions are made which fit most situations, but for instance are not applicable to an incapacitated or student spouse who is deemed to have received $200.00 per month income where there is one, and $400.00 per month income where there are two or more qualifying dependents. In those areas where a family deviates from the normal situation, frequently an extrapolation can be made.

No effort has been made to establish a value for child care, cooking and cleaning etc., if one member of the household handles these chores. But, the increase in these costs must be considered as a possibility, if both husband and wife are working. For that reason, the program may not give a complete financial picture for some situations. Domestic chores that are replaced by restaurants, laundries and other service organizations (i.e. day care) may reduce the advantage of any increase in expendable income.

Insurance is another area that is not covered by this program. The need for more life insurance may be a possibility when both husband and wife work outside the home. Adjustments in health and life insurance due to programs offered by the employer are also a factor in some cases. In any event, some thought should be given to this area.

An increase in the amount of Individual Retirement Account (IRA) savings may also be a benefit of two salaries and is not calculated by this program. Social Security Benefits accumulate in the second wage earners account and are another advantage of two incomes.

The program does not attempt to calculate the psychological benefits and liabilities that families with two salaries face. Neither does the program evaluate the security that two salaries might provide a family. It is intended to be merely another tool to help a family evaluate more intelligently the monetary effects of a second salary. Since the results of this program are intended to give only a "ball park estimate," you should discuss the financial effects of implementing any decisions you arrive at with your accountant.

(Author's note: The Tax data used in this program was derived from Commerce Clearing House, INC's Economic Recovery Tax Act of 1981 and their 1982 Federal Tax Return Manual. Changes for 1983 tax data are included on the following page.)

For program listing see page 54.

The Home Accountant.™ The #1 best-seller.

Any home finance package will balance your checkbook. But to become the #1 best-seller you've got to be something special.

The Home Accountant™ is.

It's the only one that prints a net worth statement and a personal finance statement. So you know exactly where you stand financially every day of the year. It will even print your checks, automatically.

Not only that, The Home Accountant™ lets you label every transaction. Just imagine sitting down to do your taxes and having every penny you've spent and earned neatly listed by category—and available at the touch of a button. It's an incredible time-saver.

You can also create bar, line and trend analysis graphs for every category—in color. It's great for realistic budgeting.

Sound amazing? Wait, there's more.

Let's say you write a check to pay your Visa. The Home Accountant™ automatically debits your checking account and credits your Visa account.

And it does this with every one of the two hundred* budget categories: credit cards, checking accounts, money markets, cash, rent checks, insurance payments—you customize your own financial package.

Check out The Home Accountant™ soon. You'll find it does a lot more than simply manage your money.

It manages your money simply.

*The Home Accountant™ is available for the Apple II/IBM Personal Computer/Atari 400/800 Computers/Osborne/TRS 80 Model III/Commodore VIC 64. The actual budget capacities will vary with each computer.

Continental Software
A Division of Arrays, Inc.

Apple II is a registered trademark of Apple Computer, Inc. IBM Personal Computer is a registered trademark of IBM Corp. Atari 400/800 are registered trademarks of Atari, Inc., a division of Warner Communications, Inc. Osborne is a registered trademark of Osborne Computer Corp. TRS 80 Model III is a registered trademark of Tandy, Inc. Commodore VIC 64 is a registered trademark of Commodore Business Machines, Inc.

It sells the most, because it does the most!

Continental Software Co., 11223 South Hindry Avenue, Los Angeles, California 90045 Telephone (213) 417-3003 • (213) 417-8031

```
10 ' THIS PROGRAM IS TO SIMULATE A MARRIED COUPLES
20 '  FINANCIAL SITUATION WITH ONE AND THEN BOTH
30 '          WORKING FOR A SALARY.
40 ' ******************************************
50 WIDTH 52
60 OPEN "R",#1,"B:LOVING" 'OPENS RANDOM FILE FOR UPDATE
70 FIELD #1,9 AS AA$,4 AS AB$,2 AS M1$,9 AS AW$,4 AS AC$,6
   AS AX4$,6 AS AX5$,6 AS AX6$,6 AS AX7$,9 AS AN$,10 AS
   AP$,5 AS AK$,9 AS AD$
80 INPUT "2 DIGIT - SITUATION CODE ";CODE%
90 GET #1,CODE%
100 PRINT CHR$(26)
110 X=0:Y=0:GOSUB 1630
120 PRINT "*INPUT DATA FOR 1 OR 2 SALARIES (JOINT RETURN)*"
130 PRINT "              ** YEARLY INPUT **"
140 A=CVD(AA$):PRINT "1-  LARGEST SALARY $";A
150 B=CVS(AB$):PRINT "2-  LOWEST SALARY $";B
160 IF A<B THEN GOSUB 1000
170 '** NO CHILDREN ALLOWANCE IF NO SECOND SALARY **
180 M=CVI(M1$):PRINT "3-  TAX CREDIT FOR ";
190 IF B<=0 THEN M=0
200 IF M<=0 THEN PRINT "NO CHILDREN "
210 IF M=1 THEN PRINT "ONE CHILD "
220 IF M>=2 THEN PRINT M;" CHILDREN "
230 W=CVD(AW$):PRINT "4-  OTHER INCOME PER ANNUM $";W
240 PRINT "              ** MONTHLY INPUT ** "
250 C=CVS(AC$):PRINT "5-  COST OF HOUSING PER MO. $";C
260 X4=CVS(AX4$):PRINT "6-  PRICE OF FOOD PER MONTH $";X4
270 X5=CVS(AX5$):PRINT "7-  COST OF UTILITIES PER MO. $";X5
280 X6=CVS(AX6$):PRINT "8-  CAR EXPENSES INCLUDING PAYMENT
    PER MO. $";X6
290 X7=CVS(AX7$):PRINT "9-  ALL OTHER COSTS PER MONTH $";X7
300 PRINT "  ** MONTHLY INCREASE OR DECREASE-DUE 2ND SALARY
    **"
310 N=CVD(AN$):PRINT "10- CHILD CARE  $";N;
320 P=CVD(AP$):PRINT TAB(40)"11- EATING OUT  $";P
330 K=CVS(AK$):PRINT "12- ADDED TRAVEL $";K;
340 D=CVD(AD$):PRINT TAB(40)"13- CLOTHING COSTS  $";D
350 PRINT CHR$(30)
360 X=0:Y=21:GOSUB 1630
370 INPUT "ENTER NUMBER OF SELECTION.   ENTER -DONE- TO EXIT
    ROUTINE ",V$
380 '
390 IF V$="DONE" THEN GOTO 450
400 LET E=VAL(V$)
410 IF E>13 THEN 350
420 IF E<1 THEN 350
430 ON E GOSUB 950,970,1020,1080,1100,1120,1140,1160,1190,
    1210,1230,1250,1270
440 GOTO 350
450 PUT #1,CODE%
460 ' *** TO REFLECT ALLOWANCE CLAIMED ON (FORM W-4)
470 IF A<32400 THEN R=A*.067 ELSE R=32400*.067
480 LET A1=(A+W)
490 LET A=(A1)-(1000*(2+M))
500 PRINT CHR$(26)
510 PRINT "********** ONE INCOME FAMILY **********"
520 PRINT
530 GOSUB 1290
540 PRINT "INCOME $";A1/12;" FICA $";R/12;" FED ICT $";Q/12
550 LET X1=A1/12-(R+Q)/12:PRINT TAB(30);"MONTHLY TOT ";USING
    "$$#######.##";X1
560 PRINT
570 X8=X4+X5+X6+X7+C
580 PRINT "ADD IN FOOD $";X4;" AND UTIL $";X5; ' AND AUTO
    $";X6;
590 PRINT "OTHER $";X7;
600 PRINT TAB(38);"TOT ";USING "$$#######.##";X8:PRINT
610 X9=X1-X8
620 PRINT" MONTHLY INCOME APPARENTLY NOT COMMITTED ";USING
    "$$#######.##";X9
630 PRINT
640 B1=B
650 IF B<=0 THEN M=0
660 IF B>0 AND B<A GOTO 1980
670 A=A+B
680 A2=A1+B1
690 GOSUB 1290
700 IF B1<=0 THEN GOTO 860
710 PRINT "********** TWO INCOME FAMILY **********"
720 PRINT
730 IF B1<32400 THEN R1=B1*.067 ELSE R1=32400*.067
740 R=R+R1
750 PRINT "INCOME $";A2/12;" FICA $";R/12;" FED ICT $";Q/12
760 LET X1=A2/12-(R+Q)/12:PRINT TAB(30);"MONTHLY TOT ";USING
    "$$#######.##";X1
770 PRINT
780 GOSUB 1660
790 J=(X8+P+K+D)-T
800 PRINT "CHILD CREDIT $";T;"EATING OUT $";P;"TRAVEL
    $";K;"CLOTHING $";D;
810 PRINT TAB(38);"TOT ";USING "$$#######.##";J
820 PRINT
830 X9=X1-J
840 PRINT" MONTHLY INCOME APPARENTLY NOT COMMITTED ";USING
    "$$#######.##";X9
850 PRINT
860 PRINT CHR$(30)
870 X=0:Y=23:GOSUB 1630
880 INPUT "  LOOK AT ANOTHER SITUATION? (Y OR N) ",B$
890 'NEXT LINE PERMITS A RETURN TO A MENU PROGRAM
900 IF B$="N" THEN CLOSE #1:END  'OR:LOAD "B:MENU",R
910 IF B$="Y" THEN CLOSE #1:GOTO 60
920 IF B$<>"Y" GOTO 860
930 ' DATA UPDATER
940 ' REPAIR SUBROUTINES
950 X=4:Y=2:GOSUB 1630
960 INPUT "LARGEST SALARY $ ",A:LSET AA$=MKD$(A):RETURN
970 X=4:Y=3:GOSUB 1630
980 INPUT "LOWEST SALARY $ ",B:LSET AB$=MKS$(B):IF A>B THEN
    RETURN
990 IF A=B THEN RETURN
1000 X=4:Y=2:GOSUB 1630
1010 PRINT "NOT LOWEST SALARY ":RETURN
1020 X=4:Y=4:GOSUB 1630:INPUT "0-NO CHILD  1-ONE CHILD  (X)
     NO. CHILDREN ",M:LSET M1$=MKI$(M)
1030 X=4:Y=4:GOSUB 1630
1040 PRINT "TAX CREDIT FOR ";
1050 IF M<=0 THEN PRINT "NO CHILDREN                    "
     :RETURN
1060 IF M=1 THEN PRINT "ONE CHILD                       ":RETURN
1070 IF M>=2 THEN PRINT M;" CHILDREN                    ":RETURN
1080 X=4:Y=5:GOSUB 1630
1090 INPUT "OTHER INCOME PER ANNUM  $",W:LSET
     AW$=MKD$(W):RETURN
1100 X=4:Y=7:GOSUB 1630
1110 INPUT "COST OF HOUSING OR RENT  $",C:LSET
     AC$=MKS$(C):RETURN
1120 X=4:Y=8:GOSUB 1630
1130 INPUT "COST OF FOOD (MONTHLY)      $",X4:LSET
     AX4$=MKS$(X4):RETURN
1140 X=4:Y=9:GOSUB 1630
1150 INPUT "UTILITIES (MONTHLY)         $",X5:LSET
     AX5$=MKS$(X5):RETURN
1160 X=4:Y=10:GOSUB 1630
1170 INPUT "AUTO COSTS GAS, PAYMENT, ALL (MONTHLY)
     $",X6:LSET AX6$=MKS$(X6)
1180 RETURN
1190 X=4:Y=11:GOSUB 1630
1200 INPUT "OTHER MONIHLY LIVING COSTS $",X7:LSET
     AX7$=MKS$(X7):RETURN
1210 X=4:Y=13:GOSUB 1630
1220 INPUT "CHILD CARE   $",N:LSET AN$=MKD$(N):RETURN
1230 X=4:Y=14:GOSUB 1630
1240 INPUT "EATING OUT  $ ",P:LSET AP$=MKD$(P):RETURN
1250 X=4:Y=15:GOSUB 1630
1260 INPUT "ADDED TRAVEL  $",K:LSET AK$=MKS$(K):RETURN
1270 X=4:Y=16:GOSUB 1630
1280 INPUT "CLOTHING COST   $ ",D:LSET AD$=MKD$(D):RETURN
1290 ' THIS IS TAX TABLE FOR MARRIED (JOINT)    1982
1300 LET Q=0
1310 IF A>215400! THEN Q=95149!+.5*(A-215400!)
1320 IF Q>0 THEN RETURN
1330 IF A>162400! THEN Q=68649!+.5*(A-162400!)
1340 IF Q>0 THEN RETURN
1350 IF A>109400! THEN Q=42149!+.5*(A-109400!)
1360 IF Q>0 THEN RETURN
1370 IF A>85600! THEN Q=30249!+.5*(A-85600!)
1380 IF Q>0 THEN RETURN
1390 IF A>60000! THEN Q=17705+.49*(A-60000!)
1400 IF Q>0 THEN RETURN
1410 IF A>45800! THEN Q=11457+.44*(A-45800!)
1420 IF Q>0 THEN RETURN
1430 IF A>35200! THEN Q=7323+.39*(A-35200!)
1440 IF Q>0 THEN RETURN
1450 IF A>29900 THEN Q=5574+.33*(A-29900)
1460 IF Q>0 THEN RETURN
1470 IF A>24600 THEN Q=4037+.29*(A-24600)
1480 IF Q>0 THEN RETURN
1490 IF A>20200 THEN Q=2937+.25*(A-20200)
1500 IF Q>0 THEN RETURN
1510 IF A>16000 THEN Q=2013+.22*(A-16000)
1520 IF Q>0 THEN RETURN
1530 IF A>11900 THEN Q=1234+.19*(A-11900)
1540 IF Q>0 THEN RETURN
1550 IF A>7600 THEN Q=546+.16*(A-7600)
1560 IF Q>0 THEN RETURN
1570 IF A>5500 THEN Q=252+.14*(A-5500)
1580 IF Q>0 THEN RETURN
1590 IF A>3400 THEN Q=.12*(A-3400)
1600 IF A<3400 THEN Q=0
1610 RETURN
1620 STOP
1630 '******** CURSOR POSITIONING ROUTINE *********
1640 PRINT CHR$(27)+"="+CHR$(Y+32)+CHR$(X+32);
1650 RETURN
1660 '** DEPENDENT AND CHILD CARE TAX CREDIT ROUTINE **
1670 '** CHILDREN UNDER 15 AND OTHERS THAT QUALIFY **
1680 LET T=0:F=0:C1=0:C2=0
1690 IF M=0 THEN T=0:RETURN
1700 IF B>28001 THEN T=N*.2 :GOTO 1870
1710 IF B>26001 THEN T=N*.21 :GOTO 1880
1720 IF B>24001 THEN T=N*.22 :GOTO 1890
1730 IF B>22001 THEN T=N*.23 :GOTO 1900
1740 IF B>20001 THEN T=N*.24 :GOTO 1910
1750 IF B>18001 THEN T=N*.25 :GOTO 1920
1760 IF B>16001 THEN T=N*.26 :GOTO 1930
1770 IF B>14001 THEN T=N*.27 :GOTO 1940
1780 IF B>12001 THEN T=N*.28 :GOTO 1950
1790 IF B>10001 THEN T=N*.29 :GOTO 1960
1800 IF B>0 THEN T=N*.3:GOTO 1970
1810 IF M>=2 THEN F=(C2/12)-T
1820 IF F<0 THEN F=(C2/12) :T=F
1830 IF F>0 THEN RETURN
1840 IF M=1 THEN F=(C1/12)-T
1850 IF F<0 THEN F=(C1/12) :T=F
1860 IF F>0 THEN RETURN
1870 C1=480:C2=960:GOTO 1810
1880 C1=504:C2=1008:GOTO 1810
1890 C1=528:C2=1056:GOTO 1810
1900 C1=552:C2=1104:GOTO 1810
1910 C1=576:C2=1152:GOTO 1810
1920 C1=600:C2=1200:GOTO 1810
1930 C1=624:C2=1248:GOTO 1810
1940 C1=648:C2=1296:GOTO 1810
1950 C1=672:C2=1344:GOTO 1810
1960 C1=696:C2=1392:GOTO 1810
1970 C1=720:C2=1440:GOTO 1810
1980 '** DEDUCTION FOR TWO SALARIES (JOINT RETURN) **
1990 U=B*.05  ' WILL CHANGE IN 1983
2000 IF U<=1500 THEN B=B-U ELSE B=B-1500
2010 GOTO 670
2020 ' WRITTEN BY HARRY V. MEASE
2030 '             5000 SURREY COURT
2040 '             FORT WORTH, TEXAS 76118
2050 ' OCTOBER 25,1982
```

Random access files

Although random files have several disadvantages in comparison to sequential files, there are three distinct advantages in using random access: 1) They require less room on the diskette because MBASIC stores them in a packed binary format, 2) the data can be accessed anywhere on the diskette without reading through all the information, and 3) records are easily changed or added to without having to copy the file.

By carefully scrutinizing the program, the important elements on creating and accessing a random file may be picked out. Refer to the Disk Files lesson in the Osborne *User's Manual* for a more complete discussion. Example statements from Harry Mease's program are discussed below.

60 OPEN "R",#1 "B:LOVING"

OPENs a file for random input/output access ("R" mode). The default record length of 128 bytes can be changed by adding a comma and integer after the filename ("B:LOVING", 64). #1 is a file number which will be associated with the file as long as it is OPEN. It is also used to refer other disk I/O statements to the file.

70 FIELD #1, 9 AS AA$,4 AS AB$.....etc.

The FIELD statement is used to allocate space and show the format in the random buffer for the variables that will be written to the random file. In this example, the first 9 bytes (positions) in the random file are allocated to the string varible AA$, the next 4 bytes to AB$, etc. The total number of bytes allocated in this FIELD statement must not exceed the record length that was specified in the OPEN statement (default—128). Line 70 allocates 85 bytes (9+4+2+9+4 etc).

90 GET #, CODE%

Moves the desired record into the random buffer. The record associated with CODE% is read into the buffer.

140 A=CVD (AA$)

CVD is a MBASIC function that converts a string value to a number one. Numeric values that are read in from a random diskette file must be converted from strings back into numbers. CVD converts an 8-byte string to a double precision number. (CVI=2-byte, CVS=4-byte.)

```
          1983 TAX DATA UPDATE

Program lines 470 and 730 will change when the
Social Security Tax rate is changed from 6.7%
thru $32,400 income.

     As arrived from the 1983 tax table:


1310 IF A)215400! THEN Q=91702+.5*(A-215400!)
1330 IF A)162400! THEN Q=65202+.5*(A-162400!)
1350 IF A)109400! THEN Q=38702+.5*(A-109400!)
1370 IF A)85600! THEN Q=27278+.48*(A-85600!)
1390 IF A)60000! THEN Q=16014+.44*(A-60000!)
1410 IF A)45800! THEN Q=10334+.44*(A-45800!)
1430 IF A)35200! THEN Q=6624+.35*(A-35200!)
1450 IF A)29900 THEN Q=5034+.3*(A-29900)
1470 IF A)24600 THEN Q=3656+.26*(A-24600)
1490 IF A)20200 THEN Q=2644+.23*(A-20200)
1510 IF A)16000 THEN Q=1846+.19*(A-16000)
1530 IF A)11900 THEN Q=1149+.17*(A-11900)
1550 IF A)7600 THEN Q=504+.15*(A-7600)
1570 IF A)5500 THEN Q=231+.13*(A-5500)
1590 IF A)3400 THEN Q=.11*(A-3400)


  Economic Recovery Tax Act of 1981 -- New code
Sec. 221:

1990 U=B*.1   'For tax years 1983 and
               subsequent until ammended
2000 IF U(=3000 THEN B=B-U ELSE B=B-3000

  Program lines 1660 through 1970 stay the same
for the Tax Act of 1981 until ammended.

                                        H.V.M.
```

960.....LSET AA$=MKD$(A).....

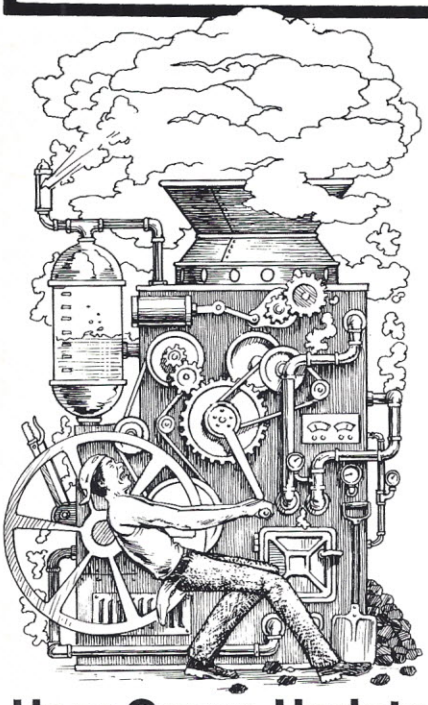
Moves data from memory to a random file buffer in preparation for a PUT statement. In the above example we are putting the contents of variable "A" in the buffer where AA$ is FIELDed.

Any numeric value that is placed in a random file buffer with an LSET statement must be converted to a string. MKD$ is a defined MBASIC function that converts a double precision number to an 8-byte string. (MKI$=integer, MKS$=single precision.) LSET left-justifies the string in the field.

450 PUT #1, CODE%

The PUT statement, together with the LSET and FIELD statements, writes a record from a random bufer to a random disk file.

An excellent book on BASIC written by Ken Knecht, covers in detail random (and sequential) files. It is called *MICROSOFT BASIC* and is published by Dilithium Press, P.O. Box E, Beaverton, Oregon, 97075. The book may be ordered directly from the publisher by *writing* or, if in stock, off the shelf at your local computer store. **B. Baldwin**



User Group Update

The following previously unpublished users' groups have notified us of their existence:

New York

Niagra Frontier Osborne Group (NAIFROG)
c/o Gene Nelson
3435 Main Street
Buffalo, NY 14214
Founded October, 1982

Maryland

Greater Washington-Baltimore Osborne Users' Group
c/o Richard L. Berman
13026 Old Stagecoach Rd.
Apartment 3715
Laurel, MD 20708
Meetings held in Howard County Library. Monthly newsletter published and extensive software library available.

Western Massachusetts

Berkshire County Osborne Users' Group
c/o Elliot Fenander
Hancock Road
Williamstown, MA 01267
OR
Bill Dudley
912 Cold Spring Road
Williamstown MA 01267
First meeting held October 22, 1982.

Canada

Vancouver Island Osborne Group
Jack Walraven, President
2840 Leigh Road
Victoria, B.C.
V9B 463
Meetings held every third Thursday of the month at the Saanich Public Library.

All the Scoop on Double Density

John Gaudio

It's here, it's here! That's right, double density Osbornes are now being sold, and people are signing up to have their machines upgraded to double density and 80 column screens. I haven't seen the 80 column screen yet, but I have been working with a double density system and it is beautiful.

There's now room to create one SUPERDISK, complete with WordStar, SuperCalc, MBASIC, and a few of the more popular CP/M programs. The new SETUP program allows you to temporarily change the arrow keys, printer type, the auto horizontal scroll option, without modifying the diskette and without having to reset the machine and press return. This makes it easy to switch from WordStar to SuperCalc to MBASIC etc. You can even set up special function keys (SFKs) to run SETUP and change the system automatically. For example you can toggle the arrow keys between WordStar and CP/M with a special function key programmed as:

SETUP<CR><CR>MF<CR>M

INDEPENDENT TRAINING PLUS

by J. Gaudio Company

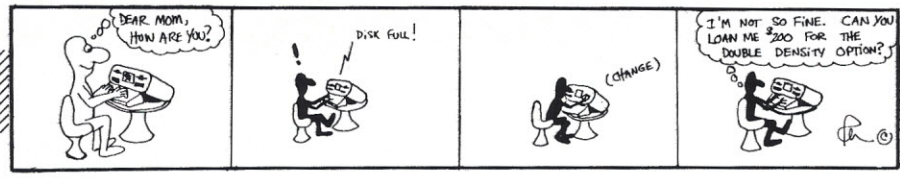
Specializing in Service to Users of the Osborne 1™

Education & Training ☐ Product Development ☐ Telephone Consultation

John Gaudio, creator of the Magic Box and the Static Leash, is helping Osborne users from Florida to Canada through telephone consultation. Call for the answer you need. In Denver, make an appointment to visit J. Gaudio Company's Osborne Independent Training Plus center for hands on experience.

J. Gaudio Company ☐ P. O. Box 27826 ☐ Denver, Colorado 80227
Telephone (303) 934-1407 ☐ "SOURCE" TCZ707

Osborne and Osborne 1 are trademarks of Osborne Computer Corporation. Independent Training Plus and ITP are trademarks of J. Gaudio Company.



remembering of course that <CR> means press the return key. It only takes five seconds from the time the SFK is pressed for the changes to be made. In fact you can now set up the system tracks for a particular task on the data disk to be used, so long as it's double density, and read that new system into memory quickly and easily. One warning though, don't try running SETUP from inside WordStar. Get out of WordStar, run the program from CP/M, and then run whatever other program you wish.

You'll notice that there are only four diskettes that come with the double density option. The BASICS diskette is pretty much the same, as is the SuperCalc disk. The WordStar disk has the INSTALL program on it, which was previously kept on the CP/M Utilities disk, and the CP/M System and Utilities diskettes are now combined into one.

Single density units allow 90K of usable storage (2K are taken up in overhead on both single and double density units). The double density units allow 183K. It used to be that the minimum file size was 2K, or about 2000 characters of diskette space, even though a file might hold only a single character. Further, under single density, every time more file space was needed, an extra 2K had to be set aside. The double density format allows blocks of diskette space as small as 1K to be assigned to a file. Thus you can usually save more information using the same amount of diskette space.

With all this extra space, and the ability to create smaller files you may run into a problem if you try to put too many files on a single diskette. The limit appears to be 58 files, regardless of their size and the amount of room remaining. This is because the space assigned to handle the disk directory is limited, and only so many names will fit. I don't expect this to cause much of a problem.

I'm convinced that the only way to make people back up regularly is to make it easy for them. With double density there's enough room left on the WordStar System diskette to temporarily backup WordStar files on the A drive, using the block write command ^KW, while using the B drive as your main data diskette. Having this extra copy on a separate diskette gives you one more safety line in case of trouble.

The extra space also comes in real handy when you want to combine the files from several diskettes. Just put each of those diskettes in the right drive, one at a time, and use the WordStar copy option to move files over to the WordStar System diskette. Once those files are there it's easy to copy them back over to a new data diskette in Drive B. Don't start getting into the habit of keeping files on the A drive. Use the extra room for temporary storage and keep the finished products on B.

Another thing, for the time being I'm still formatting and using most of my data diskettes in single density. I read and write my data diskettes using many different Osbornes, and not all of them have double density (yet). In the meantime it's much easier to have my work saved in a single density format so that those diskettes can be read by any Osborne computer. Of course the double density machines read and write single density formats just fine. In fact you don't even have to tell the Osborne what kind of diskette you've given it. It automatically recognizes it's own single and double density formats, the Xerox 820 format, the Cromemco format, and the format of the IBM PC. Additional formats are expected in the future. Osborne double density systems both read and write files in all those formats.

Some of the programs that come with the double density system have been changed. These include COPY,

30 DAY MONEY BACK GUARANTEE

A CARRYING CASE FOR YOUR OSBORNE 1™!

If you and your Osborne™ are always on the move, you need the Desert Case!

Give your investment the extra protection it needs.

- **Detachable shoulder strap for easy carrying.**
- **Set up and use without taking out of case.**
- **Bottom cushion makes Osborne stand straight when set on end. Protects against impacts.**
- **Side pouch holds 2 disc boxes.**
- **Lightweight—only 40 oz.**
- **Quality Construction**
  - **—Vinyl Case ($57.95) in brown or tan.**
  - **—Leather Case ($99.95) in white, blue, black, or brown.** (Allow 6 to 8 wks for delivery of leather case.)

DESERT COMPUTER PRODUCTS
2304 N. Kachina
Chandler, Arizona 85224

Send check or money order. Free shipping in continental U.S. — add $10.00 for shipping outside U.S. Arizona residents add 5% for sales tax.

The Desert Case — $47.95

SYSGEN, MOVCPM and SETUP. SYSGEN and MOVCPM work just the way they used to, but the older versions won't work on the double density diskettes. COPY will duplicate a single or double density Osborne format diskette. Again you don't have to be concerned with the double/single density question, it's taken care of automatically. The easiest way to copy files from a diskette of one format to another format is through the program PIP. See page R-9 of the Osborne Users Guide for a review on using PIP.

You can also use the COPY program to format diskettes. Here you'll be asked if it's to be formatted for single or double density use, and you'll find that the screen looks just a little bit different while the diskettes are being formatted. There's **no** way on the Osborne to format disks for IBM PC, XEROX 820, or Cromemco formats. That currently has to be done on the appropriate system.

The other differences you'll notice are in the SETUP program. We have lost 20 of the characters allocated for special function keys. I'd like to see that expanded rather than cut back, but everything has its price. There are now 76 additional characters available with double density. This compares with 96 additional characters under single density. The only other loss is that of 1K from the TPA (that stands for Transient Program Area, and that's where we run our programs), but these losses are far outweighed by the gains.

Additional features allow you to specify the device number of a Pet (IEEE-488) printer, and to put in a string of characters to initialize your printer. Another real handy feature allows you to read the current setup of the machine from memory, and store your changes directly into the memory, without ever touching your diskettes. It's this feature that makes it practical to put WordStar, SuperCalc, and MBASIC on a single diskette, so long as you put SETUP on that diskette as well. In this case you use SETUP to temporarily change such things as the arrow key assignments and the auto scroll option for the program you wish to run. Then you run it.

The only problems I've had were minor ones. I did run into a few BDOS errors, but none of them ever cost me more than five minutes. I've also noticed some minor problems with the reset button at times. I strongly recommend double density to everyone. The added diskette space makes dBASE II an even more valuable package than it's been so far, and paves the way for the release of true accounting software that will run with a reasonable number of diskettes. I know that this will make even more software available and practical for use on the Osborne 1. April came a little bit late this year, but it's been well worth the wait.

Special thanks go to Toni Grant of the Denver Osborne Group for helping me to prepare this article.

(John Gaudio is the President of the Denver Osborne Group (DOG).)

Here's the way I set up my SUPERDISK:

AUTOST	.COM	2k	SC	.COM	24k	WSMSGS	.OVR	26k
COPY	.COM	5k	SC	.HLP	9k	WSOVLY1	.OVR	27k
MBASIC	.COM	24k	SETUP	.COM	5k	XDIR	.COM	3k
MERGPRIN	.OVR	8k	SYSGEN	.COM	2k			
PIP	.COM	8k	WS	.COM	14k			

Disk A: 1K blocks Size = 185, 13 Files, Used = 159K, Space = 26K

WIZARD of OsZ™

a division of Contact Enterprises

New Releases in Stock and Immediately Available

Write for free data sheet on any item listed

'Software and Accessories for Osborne™ Computers is our *only* business'

PLINK & RCPMLINK — now on one disk.
Transmit complete file to bulletin board in seconds with user friendly PLINK. Saves files to buffer and writes to drive A or B. RCPMLINK enables fast, accurate block transfer of files between remote CP/M systems (or other Osborne 1 Computers)..... List $50.00

OSBOARD 1 — for graphics.
Create bar graphs, data entry forms, game layouts, logos, etc. and save to disk. Routines to convert OSBOARD 1 output files to formats compatible with BASIC, CBASIC or Assembly language. Can be used to print hard copy on many dot matrix printers. Much more..... List $50.00

WIZDEX — generates index for Wordstar.
Generate an alphabetically sorted index for a text file. WIZDEX sorts words and phrases and attaches them to end of file. Can be updated when file is edited..... List $50.00

GAMES DISK 4 — Graphics at play.
2DMAZE, 3DMAZE, BOUNCE and LANDER (by Mirashanta). Programmed in CBASIC. Games are in two levels, simple then advanced. All include extensive graphics..... List $50.00

GAME DISK 1, GAME DISK 2, GAME DISK 3.
GD1: Othello, Castle, Wahoo. GD2: Chess, Oracle, Startrek. GD3: Bomber, Lunar, Maze, Backgammon. Simple to operate; beginner to expert..... List $50.00 each

NEW PRODUCT

SIGNALMAN MARK V MODEM
At last! A small, light, compact direct connect modem for Osborne 1. Just plug it in and communicate through any modular telephone. Complete with cables and 9-pin Osborne wired connector. Uses 9v internal battery; 9v dc adapter is available..... List $129.00

Write or Call WIZARD OF OsZ™ Your Source for Osborne Software
Dealer Inquiries Invited

P.O. Box 964 Chatsworth, California 91311 Telephone (213) 709-6969
Add $2.50 for shipping and handling. In California, add 6½% sales tax

Auto Starting

Doug Hurst

Anyone who has taken their Osborne 1 out of the crate knows that all the system diskettes supplied as standard equipment have been fixed up with what is known as an "Auto Start" program. This will appear as AUTOST.COM on the disk directory. Its function is to allow you,the user, to be saved the trouble of first booting up the CP/M operating system, replacing that diskette with your system diskette then typing the file name and a <cr>to initiate your system program. This is great, especially for novices (which I consider myself) who have a tendency to reach for the reset button each time they change a diskette rather than exiting to the CP/M prompt.

Once you have purchased, written, or otherwise come by other system (COM) programs, however, you will notice the convenience of Auto Start is not present. Even Osborne OEM'd software, such as dBASE II, The Micro Link, Disk Doctor, etc, does not have this feature. That is until now. If you adhere to the following procedures you will be able to easily place an Auto Start on any system diskette you desire. Ready? Let's go.

First, boot up your system with the CP/M Utility diskette in the left (A) drive and a blank formatted disk in the right (B) drive. Type <cr> at the A> prompt, type SYSGEN <cr>. You will be prompted right through this operation as follows:

```
Operating System Generation Program
OSBORNE COMPUTER SYSTEM ONE
Revision 1.5

SOURCE Drive (A or B)—(You should pick A)
   Put SOURCE diskette in drive A, then press RETURN
      System read successfully.

DESTINATION (A, B or RETURN to exit)—(You should pick
B)
Put DESTINATION diskette in B, then press RETURN.
      System copied successfully.

DESTINATION (A, B or RETURN to exit)—(You should hit
a <CR>)
```

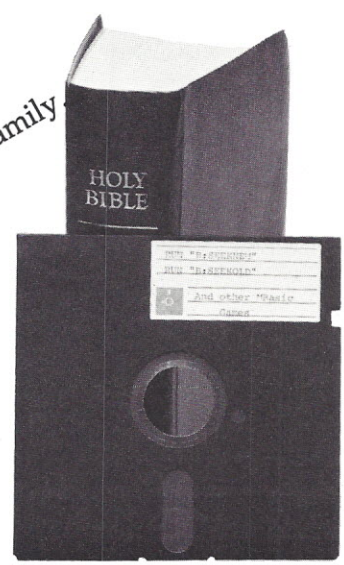
You will want the A drive to be the SOURCE and the B drive to be the DESTINATION. After the drives stop running you will have CP/M on the diskette in Drive B. It will have been "SYSGEN'D". Type <CR>.

Now, replace the CP/M Utility diskette with the CP/M System diskette and perform a warm boot (^C). When you get the fresh A>, type PIP B: = A:AUTOST.COM<CR>. After the drives stop and you have another A>, type DIR B:<CR>, to make certain that AUTOST.COM transferred to the diskette in Drive B.

Next type PIP<cr>. After a moment the A> prompt will be replaced by a * prompt. Remove the CP/M System diskette from Drive A and replace it with a diskette that has the COM file you want to Auto Start. Once this diskette is in

Continued on next page

SEEK
A Scripture Quiz Game
Seek and ye shall find.
Entertainment for all ages.
Educational for the whole family.
Know your Religion.



$17.95
includes Old & New Testament Games
50K memory
We have gone The Extra Mile by filling the Disk with the following **FREE Games**
IRA - Evaluate IRA accounts to suit your needs
MATH - Math Practice w/multi-skill levels
ELIZA - Discuss your psychological problems with Eliza
POETRY - Poetry Generator
ANIMAL - Computer deduces what animal you've selected
INPOST - Space vector war game with **graphics**
SYNONYM - Vocabulary Game
MONSTER - Adventure game with **graphics**
All games written for Osborne 1™, in MBasic. For other computers $23.95 Send check or money order to
Howard C. Cooper & Associates,
1264 North Oxford Drive,
Kaysville, Utah 84037

ACCOUNTING

USER PROVEN IN 5,000 OFFICES

A dependable, high-quality Accounting System at a very reasonable price!

This time-tested, user-proven accounting software was originally developed in 1975. There are now over 5,000 satisfied users in dozens of industries in all 50 States and 13 Foreign countries! Desktop Accountant fully automates your company's record-keeping and financial reporting. Does more, better—and gives you more for your money than any comparable system.

Complete Package of Software, Training Aids, Manuals, and Users' Newsletter:
ONLY $395

Desktop Accountant™

FULL-FEATURE, FULLY-INTEGRATED ACCOUNTING SYSTEM

Everything you need to keep the books...at a price you can afford!

Your Bookkeeper, Accountant, and Banker will salute you for installing this professional quality system. Listen to these features...

- Fully menu-driven
- Flexible Chart of Accounts
- Instant access to needed information
- Produces 39 reports & documents
- Includes complete source code
- System-prompted data entry
- On-line data file updating
- Complete, detailed audit trails
- Compatible with floppy or hard disks
- Supports pre-printed forms
- Gives you a "big company" image with printed invoices, statements, checks, reports, etc.
- Each module may be run "stand-alone" or fully-integrated to post automatically to General Ledger.
- Four self-teaching users' manuals
- Exclusive new audio cassette tape and a system "road map" guide make installation, start-up and training faster and easier than ever.

FEATURE COMPARISON CHART

FEATURE / SOURCE: / TRADE NAME:	Rocky Mountain Software Systems — Desktop Accountant	Peachtree — Series 4	TCS — Big Four	Business-master, Inc. — Business-master II	RSN Enterprises — Osborne/McGraw-Hill Basic Accounting
Price	$395	$595 to $1,800 Depends on Dealer	$200 to $1,200 Depends on Dealer	$159	$416
Includes Payroll	YES	NO	YES	YES	YES
Fully-Integrated	YES	YES	YES	YES	NO
Ready-to-Run	YES	YES	YES	NO	YES
Audio Cassette Tape Start-up & Training Aid	YES	NO	NO	NO	NO
System "Road Map" Guide	YES	NO	NO	NO	NO
Free Users' Newsletter	YES	NO	NO	NO	NO
Source Code Included At No Extra Charge	YES	NO	YES	NO	NO
Telephone "Hot Line" Support Service	YES	YES	Depends upon local dealer	YES	Depends upon local dealer
Sample Data Files for Practice & Training	YES	YES	YES	YES	NO

You Can Also Order The Outstanding Trantor Hard Disk System

For greater speed and vastly increased capacity, **upgrade** your system with the high-performance Trantor hard disk unit. You get **3 to 5 times increased speed** and **50 to 150 times increased storage capacity.** And your single, centralized hard disk **replaces up to 150 loose floppies.** It arrives ready-to-use after a simple 5 minute installation procedure. Available in 5, 10, and 15 megabyte capacities, Trantor hard disk systems consistently win exceptionally high reviewers' ratings. Order a Trantor hard disk system and turn your portable computer into a powerful office work station. **PRICES:** Five megabyte $2,495; Ten megabyte $3,095; Fifteen megabyte $3,595. **SPECIAL SAVINGS OFFER:** Buy ***any*** Trantor hard disk unit and we'll include our complete Desktop Accountant™ System, ***PLUS*** our Inventory Management package, both for only $150! **You save $540.00!**

Our Inventory Management System

Our excellent stand-alone Inventory Management System is probably the most comprehensive available in the micro market today for retail and wholesale businesses.

• Records current inventory levels on an item-by-item basis. • Multi-location/multi-department applications. • Quantity capacity to 999,999,999.999. • Inquiry function uses partial item keys. • All reports printed by department, location, or vendor and can include entire data file or any subset. • Produces 11 management information reports. • Tracks sales, receipts, returns and reserves. • Stores and sells fractional units. • User-defined history records. • Item keys can be any printable character. • Complete audit trail. **PRICE:** $295, includes full support and 220 pg. manual. Not available for single density systems.

SOFTWARE

for the OSBORNE I™ COMPUTER

Desktop Accountant™

INTERACTIVE ACCOUNTING AND FINANCIAL REPORTING SYSTEM

A COMPLETE SYSTEM!

includes all four basic general accounting modules:

- **General Ledger**
- **Accounts Receivable**
- **Payroll** with check writing
- **Accounts Payable**

- ✓ Performs all the essential functions your business needs to operate according to sound financial accounting practices
- ✓ Relieves you of time-consuming chores and tedious paperwork
- ✓ Improves personal productivity and puts you in better control of your business
- ✓ Improves company image with printed reports, forms, and checks
- ✓ Handles demanding applications with speed and accuracy
- ✓ Offers high-performance at low cost. Best value in its field!

Here's what you get:

1. A professional, full-feature, fully-integrated accounting system.
2. Six 5¼" Double Density diskettes, or Fourteen Single Density diskettes.
3. Four easy-to-follow Operator's Manuals (over 540 pages!).
4. An exclusive, new audio cassette tape with clear, step-by-step instructions for installation, start-up, and training.
5. A unique 40-page system's guide and start-up aid ("Read Me First").
6. Sample data and sample reports for practice and training.
7. Free 1-year subscription to Users' Newsletter ("Debits and Credits").
8. Three-ring binders for Manuals and Newsletters.
9. Complete source code so you can easily customize programs.
10. Telephone "Hot Line" service for helpful Installation support, Start-up support, Technical support, and Training support.

COMPLETE PACKAGE ONLY $395.

In stock...Ready to ship
Currently available in these popular formats:

- **8" Standard CP/M® single density**
- **Northstar Advantage**
- **Northstar double density**
- **Northstar quad density**
- **Morrow Designs' Micro Decision**
- **Osborne I single density**
- **Osborne I double density**
- **Kaypro II double density**
- **IBM Personal Computer**
- **Ask about other formats**

Not available in stores • Order Direct by Mail or Phone

ORDERS and INQUIRIES CALL (415) 680-8378

ROCKY MOUNTAIN SOFTWARE SYSTEMS
Microcomputer Systems and Software

Send Orders to: 1280-C Newell Avenue, Suite 147 • Walnut Creek, California 94596
VISA • MasterCard • COD • California residents add 6% State sales tax
Orders shipped within 24 Hrs. via UPS • Add $5.00 for faster Blue Label Air Service

GENERAL LEDGER

• Automates bookkeeping and financial reporting process • Produces up-to-the-minute income statements and balance sheets • Includes prior year comparisons • Flexible chart of accounts • Detailed audit trail • Trial balance includes all transactions • Departmental income statements • Instant on-line access to needed information • Reduces effort and errors

ACCOUNTS RECEIVABLE

• Helps control cash flow! • Produces timely invoices and statements • Maintains comprehensive customer data files • Customer activity available instantly on screen or printer • Produces detailed aging reports • Helps you speed collections, make financial decisions, and monitor sales performance • Detailed audit trail • Includes automatic periodic customer/client billing feature—ideal for service businesses

ACCOUNTS PAYABLE

• Greatly improves cash management • Maintains complete vendor/voucher history • Tracks current and aged payables • Produces aged payable reports on command • Automatic pay selection program allows payment by due date or discount date • Accommodates both manual and automatic check writing • Includes check register • Uses commercially available forms • Detailed audit trail • An excellent cash management tool. The savings realized from improved cash control can pay for your Desktop Accountant™ within one year

PAYROLL

• Be the office hero each week when the checks come out on time! • Stores data for all hourly, salaried, and commissioned employees • Prints payroll checks with an absolute minimum of input • Maintains monthly, quarterly, and yearly totals for reporting purposes • **Multiple states(!)** • **User-modifiable tax tables(!)** • Prints W-2s • Prepares 941 reports • Uses commercially available forms • Offers popular, comprehensive employees' check stub • Stores and reports employee personnel and payroll information

PRODUCES 39 FINANCIAL REPORTS and DOCUMENTS:

(on Screen or Printed on Paper)

General Ledger

- Chart of Accounts
- Chart of Accounts with summary dollar amounts
- Chart of Accounts with this year/ prior year summary amounts
- Daily Transactions Report
- Itemized Monthly Transactions
- Balance Sheet
- Balance Sheet with prior year comparison
- Income Statement (Profit and Loss Statement)
- Income Statement with prior year comparison
- Departmental Income Statement(s)
- Departmental Income Statement(s) with prior year comparison
- Detail report for individual accounts
- Trial Balance Statement

Accounts Receivable

- Daily Transactions Report
- Invoices (with or without pre-printed forms)
- Statements (with or without pre-printed forms)
- Summary Aging Report
- Detailed Aging Report
- Itemized Monthly Transactions
- Customer Account Report
- Customer Activity Report

Accounts Payable

- Daily Voucher Report
- Daily Credit Report
- Check Printing
- Check Register
- Vendor Status Report
- Transaction Register
- Open Voucher Report
- Aging Report
- List of Vendors

Payroll

- Employee Master Listing
- Tax Table Listing
- Payroll Check Register
- Paycheck Printing
- Monthly Summary Report
- General Ledger Transfer Report
- Quarterly Summary Report (State unemployment info.)
- 941 Worksheet
- W-2 Printing

SYSTEM CAPACITIES

Module	SD	DD	5Mb	10Mb	15Mb
General Ledger					
Accounts	100	200	400	400	400
Transactions	500	1,000	6,000	12,000	18,000
Accounts Receivable					
Customers	200	400	400	400	400
Transactions	400	800	6,000	12,000	18,000
Accounts Payable					
Vendors	200	400	400	400	400
Transactions	400	800	6,000	12,000	18,000
Payroll					
Employees	200	400	400	400	400

SYSTEM REQUIREMENTS

Microsoft BASIC; CP/M®; 56K RAM; two disk drives; 132 column printer (an Epson MX-80 printer with compressed mode is acceptable)

CP/M is a registered trademark of Digital Research Corp.
Osborne I is a trademark of Osborne Computer Corp.
Desktop Accountant is a trademark of Rocky Mountain Software Systems.

©1982, 1983 Rocky Mountain Software Systems

the A drive, type B: = A:XXXXXXXX.COM<CR>. The file is now transferring to Drive B. (Of course the XXX's will be replace with the name of your COM file). The first time I did this was with The Micro Link Communications program, so I typed ML.COM.

> WARNING!! SOME COM FILES HAVE OTHER COM AND OVERLAY FILES ASSOCIATED WITH THEM. WORDSTAR AND dBASE II ARE THIS WAY. BE SURE TO PIP ALL THESE FILES OVER TO THE B DRIVE IN THE SAME MANNER AS YOU DID THE PRIMARY COM FILE.
>
> EXAMPLE: *B: = A:XXXXXXXX.COM (MAIN COM FILE)
> *B: = A:YYYYYYYY.OVR (ASSOCIATED OVERLAY FILE)
> *B: = A:YYYYYYY.COM (ASSOCIATED COM FILE)

After the drives stop running replace the diskette in Drive A (the one with your unglamorous COM files on it) with the CP/M Utility diskette once again. Type <cr>. This will take you back from the * prompt to the A> prompt and perform a warm boot. At this point you should have AUTOST.COM and XXXXXXXX.COM (possibly YYYYYYYY.OVR and YYYYYYYY.COM also) on the B drive if you check the directory.

Now we must modify the AUTOST.COM on Drive B so it will properly boot up your new primary COM file from a "cold" start situation. When this has been accomplished, you will be able to turn on your Osborne 1, put your new diskette in Drive A, type <cr> and have your COM file booted up real pretty with the Osborne logo and everything. Sound Good? Well, let's finish if off.

Type DDT B:AUTOST.COM<cr>. After a few moments you will see something like this on your screen:

```
A>DDT B:AUTOST.COM
DDT VERS 2.2
NEXT PC
ØA8Ø Ø1ØØ
```

Your new prompt is the " – ". The next couple of happenings may be quite alien to you but please do not be afraid. Type DØ1ØØ<cr>.

This is what you will see:

```
-DØ1ØØ
Ø1ØØ 2A Ø1 ØØ 2E ØØ 7C D6 16 *....|..
Ø1Ø8 67 22 65 Ø1 11 2Ø Ø3 Ø1 g"e.. ..
Ø11Ø FF Ø7 1A D6 41 12 13 ØB ....A...
Ø118 78 B7 C2 12 Ø1 11 73 Ø1 x.....s.
Ø12Ø CD 6Ø Ø1 11 ØØ FØ 21 2Ø .`....! 
Ø128 Ø3 Ø1 ØØ Ø7 ED BØ 11 75 .......u
etc
```

Now, type D <cr> twice more. Here is what you will see.

```
-D
Ø16Ø ØE Ø9 C3 Ø5 ØØ 21 34 Ø4 .....!4.
Ø168 48 45 4C 5Ø ØØ ØØ ØØ ØØ HELP....
Ø17Ø ØØ ØØ ØØ 1A 24 1B 3D 3Ø ....$.=Ø
Ø178 21 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø !
Ø18Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø
etc
```


Professional Power Tools™

TAILOR-MADE SOFTWARE AT READY-MADE PRICES

Easy-to-use and powerful software modules are now available that you can put together to suit your own unique requirements. Incorporate only those options needed for your own customized professional applications. Don't pay for features you'll never use -- buy a low-priced start-up package and add a piece at a time, as your requirements grow.

TRY US ON FOR SIZE

Get started with **EZTAX** -- part of our PROfessionalTAXPACKage. This program makes preparation of federal income tax returns a snap. For the professional tax preparer, it will make your 1983 tax season easier and twice as profitable. Order one or both of our start-up packages:

EZTAX I - a set of SuperCalc™ templates which organizes your tax data and instantly calculates taxes due. It prints out all the data necessary to fill out forms 1040A,B,C,D,E ---- only **$25.00***

EZTAX II - a fast, easy-to-use stand-alone program which does the calculations and prints the final return on standard IRS forms - also prints a neat backup file for your records -- only **$35.00***

ORDER **BOTH NOW for only $50.00** * Add $1.50 for postage & handling - California residents add 6% sales tax

SEND YOUR CHECK to The SOFTWARE SUPERMART
P.O. Box 16174 Irvine, CA 92714 or call (714)752-0748

Other PROFESSIONAL POWER TOOL Sets : GRAPHicsPACKage, FINancePACKage, STATisticsPACKage & more.

```
-D
Ø1CØ 49 4E 47 2Ø 43 5Ø 2F 4D ING CP/M
Ø1C8 2Ø 41 4E 44 2Ø 48 45 4C  AND HEL
Ø1DØ 5Ø 2E 2E 2E 2Ø 2Ø 2Ø 2Ø P...
Ø1D8 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø
Ø1EØ 2Ø ØD ØA 2Ø 2Ø 2Ø 2Ø 2Ø  ..
Ø1E8 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø 2Ø
etc
```

You will notice a column of four digit numbers on the far left, eight columns of two digit numbers in the middle and some strange looking characters and numbers with intermittent semi-legible characters over on the right. In the characters on the right you will recognize the words "HELP" and "LOADING CP/M AND HELP". This is what we are going to change. First, however, some explanation is in order.

The four digit numbers on the left are "hexidecimal" numbers, which represent memory addresses. The two digit numbers in the middle are the "hexidecimal" number contents of these memory addresses and the numbers and characters on the right are the ASCII equivalent of those two digit hexidecimal numbers in the middle. The hex addresses listed are eight numbers apart.

```
Ø168 48 45 4C 5Ø ØØ ØØ ØØ ØØ HELP....
Ø17Ø ØØ ØØ ØØ 1A 24 1B 3D 3Ø ....$.=Ø
```

Where you see: **48**, the hex equivalent of the ASCII "H" is located at memory address Ø168. Even though the address number Ø169 is not printed, this is where the 45 hex resides (to the right of the underlined 48 hex). Ø16A holds the 4C (ASCII "L") etc. until you get up to Ø16F on the far right, which holds a ØØ hex, and then back to the start of the next line which is Ø17Ø and holds ØØ hex.

We have to change the word "HELP" and also the wording after "LOADING" since we will not be loading CP/M AND HELP now. The word that will replace "HELP" is the name of your primary COM file minus the ".COM". The word after "LOADING" will describe your file.

EXAMPLE: If this were for WordStar, "HELP" would be replaced with "WS" and "CP/M AND HELP" would be replaced with "WordStar".

Ready to proceed with the actual change? It's not very hard.

Type SØ168<cr>. You will see this:

> -SØ168 Note: the S function of the DDT program lists Ø168 48—individual addresses, with current contents, and allows the user to change the contents of the address. This is what we are going to do.

Again I will use The Micro Link program for an example. The Micro Link is ML.COM.. So, in my case, I replaced "HELP" (48, 45, 4C, 5Ø hex) with "ML" (4D, 4C, ØØ, ØØ hex). It looks something like this:

```
-SØ168
Ø168 48 4D <cr>
Ø169 45 4C <cr>
Ø16A 4C ØØ <cr>
Ø16B 5Ø ØØ <cr>
Ø16C ØØ _
```

Continued on next page

Write your own software library.

Now there's no need to spend money on an extensive program library for your personal computer. You can do it *yourself* with Personal Pearl.

There's no complicated programming language to learn and no jargon to memorize. Pearl speaks plain English, which means you have instant program-ability.

All you need to make use of Personal Pearl is a 56K RAM microcomputer with CP/M operating system. Now there is no limit to the programs you can create. The amount of record storage space and maximum file size are determined only by your computer's disk capacity.

Here's how you do it.

To write a program with Personal Pearl, use the screen like a piece of paper in the typewriter. Pearl's powerful Program Generator allows you to type exactly what you want your computer to respond to, in the way that feels comfortable to you. This personal link with the entire program enables you to solve even the most compex problems easily.

Personal Pearl also functions as a Forms and Reports Generator, so documents come out looking just the way you want them. You can modify formats, add reports, change displays or update information at any time. In addition, Pearl's Data Base Manager helps you sort, search, reorganize and analyze as quick as a flash!

Use it to customize the software you already have.

Pearl can be used interactively with your existing spread sheet or word processing programs. You can transfer information from Pearl to those programs to suit your particular needs.

The Personal Information System™

personal pearl™

Relational Systems International Corp.
P.O. Box 13850 • Salem OR 97309
503-363-8929

Note: the <cr>'s will not show on screen. The ØØ's just eliminate the LP in HELP.

The easiest thing to do now is to continue typing <cr>'s until you get to address Ø1C4. When you arrive it will look like this:

```
Ø1C3 2Ø
Ø1C4 43
```

Now, replace CP/M AND HELP. It went like this for The Micro Link example:

```
Ø1C4 43 4D <cr> M
Ø1C5 5Ø 69 <cr> i
Ø1C6 2F 63 <cr> c
Ø1C7 4D 72 <cr> r
Ø1C8 2Ø 6F <cr> o
Ø1C9 41 4C <cr> l
Ø1CA 4E 69 <cr> i
Ø1CB 44 6E <cr> n
Ø1CC 2Ø 6B <cr> k
Ø1CD 48 ØØ <cr>
Ø1CE 45 ØØ <cr>
Ø1CF 4C ØØ <cr>
Ø1DØ 5Ø ØØ <cr>
Ø1D1 2E ØØ <cr>
Ø1D2 2E ØØ <cr>
Ø1D3 2E ØØ <cr>
Ø1D4 2Ø _
```

Note: Again, this is my example. You would look up the hex equivalent of your ASCII characters and insert them. Be sure to use Ø's (ØØ hex) or spaces (2Ø hex) to eliminate anything left over from "CP/M AND HELP".

Also, the <cr>'s and The Micro Link will not appear on the screen.

Almost done! All we have to do is make sure the change is saved permanently on the diskette. This is quite easy. At the last address type a period(.) and a <cr>, then a ^C. Like this:

```
Ø1D3 2E ØØ
Ø1D4 2Ø .  <cr>
-^C
```

It should then look like this after the drives stop running:

```
Ø1D3 2E ØØ
Ø1D4 2Ø .
-^C
A>
```

Now type SAVE 10 B:AUTOST.COM <cr>. After a moment you should see this:

```
A> SAVE 10 B:AUTOST.COM<cr>
```

Note: The 10 means you are saving 10 pages of hex memory.

That's it folks. You should be able to take your new diskette out of Drive B, hit the reset button, place it in Drive A, hit the <cr> and watch the fruits of your labor. The logo should pop onto the screen and proudly announce LOADING XXXXXXXX, and then go right into the .COM file execution.

(This article was reprinted from the FOGHORN, with permission.)

SWAN SOFTWARE

Professional Programs for your Osborne* Computer

VISA* MasterCard

Include card number and expiration date.

PHONE ORDERS ONLY: 717-627-0504

Or Write

Post Office Box 1014

Columbia, Maryland 21044

MAIL-IT $49.95

Professional mailing list manager stores up to 500 records per diskette. Search and sort on any of 8 fields. Room for 2 names, full address, phone and a comment line. Completely adjustable output formats include directory, labels, envelopes and custom designs. Produces Mail-Merge* compatible files. Handles the new ZIP codes too!

FILE-IT $49.95

Simple screen entry form designer makes FILE-IT a joy to use. Just type in your form directly on the screen and you're ready to begin entering, sorting, and retrieving data and printing reports. Can be used for inventories, indexes, lists, customer or vendor data bases. This is a data base manager that doesn't require a computer science degree to use!

All programs include a complete operations manual and master diskette.
MD residents add 5% tax.

Manuals only—$10.00 each, refundable upon purchase of program.

*IBM is a trademark of International Business Machines Corp. *Osborne is a trademark of Osborne Computer Corp. *Mail-Merge is a trademark of MicroPro Int.

A Program to Create PRINT Statements

Glenn C. Winters

Programs that create BASIC programs are becoming more common lately. This type of software is useful especially when tedious but dull programming can be replaced by the computer.

One of the dullest steps in creating programs is writing the PRINT statements that display instructions to the program user. A friendly word processing package can lighten that chore and give a polished look to the display at the same time. But the word processing software won't number lines for you or provide the PRINT'' at the beginning, and that essential '' at the end, without tedious editing.

As an example, how many of you typed in Kelly Smith's program from the premiere issue of *The Portable Companion*? I did, and exactly as he described. Entering the user instruc-

TABLE 1
Microsoft BASIC Source Code for WRINST

```
10 CLEAR:DEFINT A-Z
20 PRINT CHR$(26):PRINT"DO YOU WANT INSTRUCTIONS?":A$=INPUT$(1)
30 IF A$="Y" THEN GOSUB 360
40 INPUT"NAME OF FILE TO BE READ";NF$
50 INPUT"NUMBER OF SCREENS OF TEXT";NS
60 DIM NL(NS)
70 FOR I=1 TO NS:PRINT"LINES ON SCREEN";I;:INPUT NL(I):NEXT
80 INPUT"STARTING LINE NUMBER(DEFAULT IS 10)";SL:IF SL=0 THEN SL=10
90 INPUT"LINE SPACING(DEFAULT IS 10)";SP:IF SP=0 THEN SP=10
100 OPEN "R",#1,NF$,128:FIELD #1,128 AS AR$
110 OPEN "R",#2,"B:TEMP.DOC",66:FIELD #2,65 AS AW$,1 AS E$
120 GOSUB 220:' TO LOAD T$
130 NP=1:NL=1:T1$=""
140 Z1$="PRINT":Z2$=CHR$(34):Z3$=":"
150 Z4$=":A$=INPUT$(1):PRINT CHR$(26)":Z5$="HIT ANY KEY TO PAGE"
160 IF NL>NL(NP) THEN GOSUB 280:' JUMP TO NEXT SCREEN
170 GOSUB 230:' EXTRACT 52 TEXT CHARACTERS FROM T$
180 T1$=STR$(SL)+" "+Z1$+Z2$+T1$+Z2$
190 SL=SL+SP:NL=NL+1
200 GOSUB 350:' PUT TO DISC
210 GOTO 160
220 GET #1:T$=AR$:RETURN
230 FOR N1=1 TO 53
240 T2$=LEFT$(T$,1):N2=LEN(T$):IF N2=1 THEN GOSUB 220 ELSE
    T$=RIGHT$(T$,N2-1)
250 IF ASC(T2$)<31 THEN IF N1>1 GOTO 270 ELSE 240
260 T1$=T1$+T2$:NEXT N1:N1=53
270 T1$=LEFT$(T1$,N1-1):RETURN
280 IF NP=NS GOTO 320
290 T1$=STR$(SL)+" "+Z1$+Z3$+Z1$+Z2$+Z5$+Z2$+Z4$
300 GOSUB 350:' PUT TO DISC
310 NP=NP+1:SL=SL+SP:NL=1:RETURN
320 T1$=STR$(SL)+" "+Z1$+Z3$+Z1$+Z2$+"HIT ANY KEY TO RUN"+Z2$+Z4$
330 GOSUB 350:' PUT TO DISC
340 CLOSE #1:CLOSE #2:END
350 LSET AW$=T1$:RSET E$=CHR$(13):PUT #2:T1$="":RETURN
360 PRINT CHR$(26)
```


OsSTAND™

DESIGNED TO RAISE YOUR OSBORNE VIEWS:

- **Elevates Osborne Screen** - comfortable heads-up view virtually eliminates eye strain, sore neck, and backache.
- **Fully Adjustable** - to suit your individual preference, you can tilt your screen 8-20 degrees (and 9-12 inches above your desk).
- **Functional Storage Space Built In** - you can neatly extend your Osborne's disk storage and natural A:program B:data file scheme.
- **Quality Construction** - solid oak and composition board, with dark wood stain and charcoal grey finish to match Osborne's understated elegance.

$89.95 plus $5.00 shipping anywhere in continental U.S. Check or money order. Colorado residents add sales tax. Please allow 3-5 weeks for delivery.

MICRO METHODS™ P.O. Box 25905 Colorado Springs CO 80936

tions took me about an hour, just as his article predicted. More than half of that time was spent editing the instructional text to add line numbers and PRINT '' and so on. Well there is a much faster way. Let the computer take your final text and add the rest of the words to make that text line a numbered PRINT statement. That's what WSRINST will do.

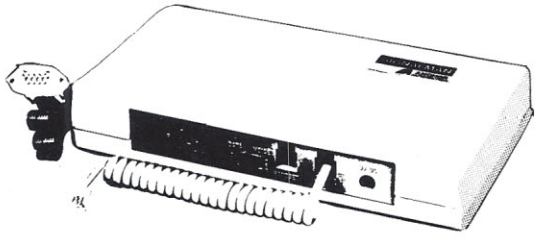
The text from WordStar, after processing with PIP, consists of text lines—as many characters long as you had set on the margins—each followed by three characters, a space, a carriage return and a line feed. Thus the text file can be scanned one character at a time to build up a string of text as many characters long as you wish. The non-printing characters at the end of each text line are discarded once they have been used as indicators of the end of a line of text. Essentially that's how WRINST works. Once a line of text has been extracted, the line number, PRINT and quotes are added to the string. Then the string is put on disk in another file. When all the text has been processed, this new file is a list of numbered PRINT statements, ready to MERGE with the rest of your source code.

```
370 PRINT"                    WRINST Instructions"
380 PRINT"  "
390 PRINT"This  program will take WordStar text and convert to"
400 PRINT"PRINT  statements  one text line at  a  time.   Thus"
410 PRINT"program instructions may easily be added to a  BASIC"
420 PRINT"program.   These  instructions are an example of the"
430 PRINT"use  of  WRINST.   The  instructions appear  on  the"
440 PRINT"screen exactly as written on WordStar."
450 PRINT:PRINT"HIT ANY KEY TO PAGE":A$=INPUT$(1):PRINT CHR$(26)
460 PRINT"The instructional text is first entered to disc with"
470 PRINT"WordStar as a document file.  When entering text the"
480 PRINT"right  margin  should  be set to 52 so  that  it  is"
490 PRINT"unnecessary  to scroll to see all the text.   WRINST"
500 PRINT"expects the text to be setup this way.  As you enter"
510 PRINT"text keep track of the number of seperate screens of"
520 PRINT"text to be displayed and the number of lines of text"
530 PRINT"on each screen.  The program will ask for this data."
540 PRINT" "
550 PRINT"After  the text is complete,  you  should  carefully"
560 PRINT"review for typographical errors.   It will be diffi-"
570 PRINT"cult to correct them later."
580 PRINT:PRINT"HIT ANY KEY TO PAGE":A$=INPUT$(1):PRINT CHR$(26)
590 PRINT"After  the text file is saved to disc,  PIP must  be"
600 PRINT"used  to modify the file.   With PIP in drive A  and"
610 PRINT"the  text disc in drive B,  the appropriate  command"
620 PRINT"is:   PIP  B:filename=B:filename[Z] .   Now the text"
630 PRINT"file  is  prepared to be converted to  BASIC  state-"
640 PRINT"ments."
650 PRINT:PRINT"HIT ANY KEY TO PAGE":A$=INPUT$(1):PRINT CHR$(26)
660 PRINT"Now  enter  WRINST.   The program will ask  for  the"
670 PRINT"filename that contains the text.  Include the source"
680 PRINT"drive  if it is not the default drive.   The program"
690 PRINT"then asks for the data on number of screens of  text"
700 PRINT"and the number of text lines on each screen.  Lastly"
710 PRINT"the  program  asks you to provide a line number  for"
720 PRINT"the  first PRINT statement and  line  spacing.   The"
730 PRINT"value  of  10 will be used in default if you do  not"
740 PRINT"specify otherwise.   That's all you need to run this"
750 PRINT"program."
760 PRINT:PRINT"HIT ANY KEY TO PAGE":A$=INPUT$(1):PRINT CHR$(26)
770 PRINT"When WRINST completes its task there will be a BASIC"
780 PRINT"program on disc B with the name TEMP.DOC.   This may"
790 PRINT"then  be MERGEd with the rest of the source code for"
800 PRINT"your program."
810 PRINT"If you will now press any key, WRINST will continue."
820 PRINT:PRINT"HIT ANY KEY TO RUN":A$=INPUT$(1):PRINT CHR$(26)
830 RETURN.
```


COMPUTER CANNERY P.O. BOX 23425 • SAN JOSE, CA 95153 • (408)/226-3184

Finally—

A MODEM for the OSBORNE™
— MODEM PORT —



MARK V by Anchor Automation
is designed for the OCC-1 Modem Port.
This is a Direct Connect, 300 Baud Modem
Runs on a 9V battery $129.95

COMMUNICATIONS SOFTWARE FOR THE OSBORNE
PLINK, RCPMLINK by WIZARD of OsZ™
Both programs on disc — ready to run $50.00

TO ORDER: Send check or money order to:
(Please add 3% shipping/handling charges — California residents add appropriate sales taxes)
COMPUTER CANNERY — P. O. Box 23425 • San Jose, CA 95153 • (408) 226-3184

A listing for WRINST is given in Table 1. Don't enter the PRINT statements in lines 370-820, let the program do that for you as its check-out run. Should take less than a minute.

The program has three idiosyncrasies:

1. Soft hyphens do not transfer to the PRINT statements. A little clean up editing fixes that.
2. To get a blank line, you must enter at least one space in the WordStar text.
3. Merge the PRINT statements to the rest of the source code, not the other possible order. If you do MERGE source code to the PRINT statements, the program won't LIST correctly (it overprints on my Epson).

Perhaps a reader can suggest modifications that fix these problems. Better yet, an assembly language version would be even faster.

(Mr. Winters is a member of the Capital District Osborne Group in New York.)

A Typewriter Becomes a Printer

Chris Russell

If you want the flexibility of a typewriter/printer combination for your Osborne, I suggest using a Silver Reed EX55 (around $1200.00) and the Wilker Daisy Typeface (around ($300.00). The Silver Reed is an excellent letter quality printer. The Wilker's selected the Silver Reed over others because it had less down time when used as a printer for any length of time.

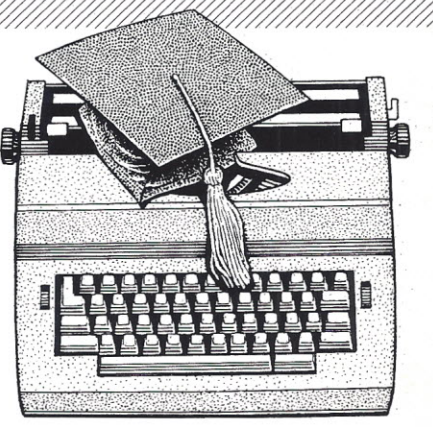
The Wilker Daisy Typeface consists of a printed circuit board that the user can easily connect inside the Silver Reed and the other end of the cable connects to the Osborne's RS232 port with a straight-through pin configuration.

Along with the hardware connection use the SET-UP procedure from CP/M with:

a) Diablo X-ON, X-OFF
b) Select either 300 or 1200 baud

and use the INSTALL procedure from WordStar with:

a) Select Teletype like printer with backspace



b) Select X-ON, X-OFF as communication protocol
c) Select TTY as device output

You can also optimize the Silver Reed by changing WordStar's control codes to those of the Wilker Daisy Typeface, but this author was not brave enough as yet and this set up works just fine for me.

I also found the printer quality of the Silver Reed excellent and "hook-up" procedure very straightforward. I would fearlessly recommend this combination. A demonstration can be arranged by calling Patrick Keown, (415/969-2666) Silver Reed; Jerry Medina, (415/828-6802) Wilker Daisy Typeface. These are California numbers.

(Chris Russell is a FOG member and this article was reprinted, with permission, from the FOG newsletter.)

Larger Screen for Osborne

New Easy-View magnifying system is fully portable and stores inside the Osborne case.

Free Graphics Program with Feb./March Orders

- *Larger screen size eliminates eye strain and errors*
- *Finest optics of high-grade acrylic by world leader Bausch & Lomb*
- *Light weight and scratch resistant*
- *Fully adjustable, up, down, left, right*
- *Sturdy anodized aluminum bracket with "velcro" type fastener*
- *No flimsy wires to align or accidentally knock down*
- *Satisfaction guaranteed or your money back*
- *Full one year warranty and shipping cost included in price*

Easy View

If you have an Osborne, you need Easy-View.

Now only $29.95

☐ ***VISA*** ☐ ***MasterCharge*** ☐ ***Check enclosed***
☐ ***or send for free brochure***

P.O. Box 20595, Portland, Oregon 97220 (503) 256-4244 ext. 4

OSBORNE

Software now available for the Osborne 1™

Forth™
Forth is a high-level computer language in which the Osborne user can use the vocabulary provided, or extend it with his own words for your specific applications. Writing and editing with Forth is easy using the completely interactive screen editor. This language is ideal for controlling peripheral devices such as printers, cameras, timers and laboratory devices. Forth has been used to write data base programs and other programs for general business. *(The Software Works Inc.™)*

Personal PEARL™
The easy way to create custom application programs through English language interaction with your Osborne computer. Personal PEARL asks you for examples of the results you require and then produces an applications program to provide them. For the individual who requires custom computer solutions without the cost and time delay of hiring a programmer. A flexible report generation facility is built into Personal PEARL. *(Relational Systems International®)*

Personal Datebook™
This popular program handles a calendar and appointment schedules for two people or offices (using Osborne 1 single density), keeping an accurate and complete schedule for the busy executive or professional. Personal Datebook saves frustration when trying to find a convenient time for a staff conference—it automatically finds a time when all staff members are available. A valuable tool for time management, Personal Datebook keeps a permanent record of each day's activities and provides print-out functions for future reference. *(Organic Software®, Digital Marketing™)*

DataStar™
DataStar is an easy-to-learn, versatile and comprehensive data entry program, retrieval and update system for your Osborne. DataStar handles recordkeeping applications from initial form design through updating, addition/deletion, and search/ retrieval of records. DataStar is designed to support speed and accuracy, allowing fast typists to operate at their best rate. The programs comprehensive HELP messages and instructions also provide the assistance the inexperienced user needs. *(MicroPro™)*

Disk Doctor™
This program reclaims damaged diskettes and allows you to recreate accidentally erased files. Disk Doctor helps the Osborne user to restore damaged or faulty diskettes to a usable condition, recovering as much data as it can. As an added benefit, Disk Doctor can also be used to certify new diskettes and eliminate any bad sectors before they can cause problems. *(SuperSoft™)*

Footnote™
Footnote numbers and formats footnote calls and the actual words in WordStar text files. Footnote numbers notes consecutively, and formats the file, placing the notes at the bottom of the appropriate page, or, at the user's option, moving them out of the text to a separate footnote file. *(Pro/Tem Software, Inc.™)*

Milestone™
Milestone is used for planning priority scheduling and tracking of small projects on your Osborne computer. Milestone creates Gant project charts and can be configured to find the critical path of a project. Two kinds of users will find Milestone helpful: project planners who are not yet using computers as planning tools, and planners who are disenchanted with their powerful project planning systems on minis or large frames. *(Organic Software®)*

Enumerator™
Enumerator adds variable line numbering abilities to documents created by WordStar. Enumerator allows you to number by line in any sequential pattern (ideal for attorneys, text writers and BASIC program writers).
(The Orthocode Corporation™)

dBASE II™
dBASE II is a powerful, easy-to-use data management tool for constructing and manipulating numeric and character information files. A special feature of dBASE II is its own English-style program-building-language. You may SORT, EDIT, or DISPLAY a database directly from the keyboard, or write menus and programs to support your specific applications. *(Ashton-Tate, Inc.™)*

System Checker™
A very simple verification program which allows the Osborne owner to have confidence in operation of his computer. A comprehensive series of tests analyze memory, disk drives, visual display, CPU and printer. each test shows an easy to understand pass/fail response. A manual helps the user to understand what each option tests, and what the responses mean in easy-to-understand terms with no computer jargon. *(Supersoft™)*

SuperSort™
Allows the Osborne user to perform sorting, merging, and record-selection functions on data files. SuperSort is compatible with BASIC, Fortran, Cobol and assembler applications programs, and can also be used with mail lists maintained with Mailman™ and WordStar. Sorts up to 32 files into a single output file, automatically using external merge as necessary, depending upon the amount of data and memory available. *(MicroPro™)*

Grammatik™
Grammatik provides the Osborne user with a unique program that analyzes written styles at both the word and the sentence level. This document-checking system checks for two sources of potential problems; style and typographical errors. Style analysis includes checks for specific phrases commonly recognized as being poor or wordy usage, as well as compiling statistics about word and sentence length. Typographical checking detects a number or errors such as: double words, capitalization at the beginning of sentences, and inconsistent and punctuation marks. *(Aspen Software Company™)*

Money Maestro™
Money Maestro is designed to provide financial recordkeeping, tax reporting and budgeting for professionals, clubs, families and very small businesses. Those who recognize the benefits of accurate records, but don't require full-blown double-entry accounting systems, will find Money Maestro to be the fast, simple and complete money management package they seek. *(Innosys, Inc.™)*

Microsoft® Basic Compiler
Allows Osborne users to compile their MBasic interpretive programs into true Z80 machine code. The Basic Compiler provides you with three major benefits: 1) increased speed of execution for most programs; 2) decreased program size for extremely large programs, and 3) source code security. When you distribute a compiled program, you distribute optimized machine code, not source code. Consequently, you distribute your program in very compact form and protect your source program from unauthorized alteration. The package also included a relocatable Z80/8080 assembler for use under CP/M. *(Microsoft™)*

Mailman™
Mailman creates and manages your mailing list. Formatted screen entry with eight different selecting criteria gives the Osborne user ease of access and entry, along with discrete listing capabilities. In addition, the program automatically sorts data by zip code and name. Mailman is designed to work with WordStar and MailMerge® . *(Standard Microsystems™)*

BSTAM™
BSTAM is a telecommunications program that allows the Osborne user to send and receive any CP/M file with complete error checking. The BSTAM documentation gives the user a comprehensive overview of types of channels, modes of transmission, sending and receiving any CP/M file. A copy of BSTAM is required on both systems involved in the communication. *(Byrom SoftwareTM)*

Real Estate Investor Calc-aid™
A SuperCalc™ overlay designed for both the real estate professional and the potential home-buyer or seller. Using SuperCalc's "What-if" capabilities, comparative analysis of the complex factors involved with real estate investment can be performed swiftly Models are supplied for individual residence or income property analysis. *(SimpleSoft™)*

Documate/Plus™
This is an indexing program that works with WordStar to create an automatic text index or table of contents. Documate/Plus supports up to 8 levels of sub-indexing, and you can choose to index either words or phrases. *(The Orthocode Corporation™)*

Spellguard™
Spellguard is a computer program that helps the user to eliminate spelling and typographical errors in written materials prepared with WordStar. Two dictionaries are supplied with Spellguard: the first consists of 20,000 of the most frequently used words in the English language and the second contains 10,000 words and can be easily expanded to include technical vocabulary and/or foreign languages. *(Sorcim™)*

muMATH-80™
muMATH-80 is a fully interactive Symbolic Math System that efficiently and accurately performs true algebraic and analytic operations. muMATH can evaluate and simplify expressions containing variables that have not been assigned numeric values. The muSIMP-80™ programming language is provided with this package to extend muMATH or to implement other Artifical Intelligence applications. However, most Osborne users will find muMATH sufficiently powerful to handle the majority of their mathmatical problems. *The Soft Warehouse™)*

Math*™
This program interacts with WordStar to add basic math capability to your Osborne computer. Math* performs addition, subtraction, multiplication and division. Within your WordStar document, Math* allows you to perform math functions in either rows or columns. *(Force Two®)*

These software packages are now available at your local authorized Osborne dealer.

NOW INCLUDING INTERNAL RATE OF RETURN

REAL ESTATE OVERLAYS FOR SUPERCALC™

- Create detailed income-and-expense pro formas.
- Play "What if...?" with a sophisticated analysis of cash flow and sale proceeds. Input basic property data and then see *automatic* calculation of debt service, accrued interest, depreciation by new ACRS rules, after-tax cash flow, mortgage payoffs, capital gain, recapture, after-tax sale proceeds, internal rate of return, and much more.
- Produce complete loan amortization schedules.

Six templates in all, with full documentation. Available for the Osborne at $110.00 plus $3.00 shipping. Please call for other formats. CT residents add 7½% tax. MC/VISA accepted.

SuperCalc is a trademark of Sorcim Co.

RealData, Inc. P.O. Box 691
Southport, CT 06490
RD 203-255-2732

There Are Two Types of Osborne* Wordstar* Users: Those Who Have Accidentally Lost UNSAVED Text and Those Who Are Going To . . .

SO, EVEN WHEN THE DOCTOR CAN'T HELP YOU . . .

IMAGE CAN!

Announcing **IMAGE!** A new, easy-to-use emergency program designed by Steve and Chris Rudek just for your Osborne computer. Written in assembly language, **IMAGE** is all you will usually need to recover unsaved textual material lost while using Wordstar*. **IMAGE** rescues text from memory instead of from disk and it will work in these unpredictable situations:

- **FULL DISK**
- **WRITE-PROTECTED DISK**
- **BAD DISK SECTOR**
- **ACCIDENTAL FILE ABANDONMENT**
- **STATIC DISCHARGE**
- **ACCIDENTAL RESET**
- **POWER BROWNOUT (but not blackout)**
- **And any other problem or error which does not erase memory or disable the reset button.**

The Price? $25. (Includes full documentation). If you value your time, **IMAGE** will probably pay for itself with one use. Money-Back Guaranteed

SEND YOUR CHECK TO: TANSTAAFL
6813 Kettering Circle,
Fair Oaks, CA 95628

trademark of Osborne Computer Corp. and MicroPro Int.

new Products

Word Processing News

A bimonthly newsletter published by Word of Mouth Enterprises, WP News focuses on the writer's point of view on word processing. Articles include reviews of word processors, software reviews and interviews with prominent writers who have made the switch. Subscription rate is $20 per year and back issues are available. Sample available for $2.

Barbara Elman, Editor
1765 N. Highland #306
Hollywood, CA 90028

Microcomputer Workshops

Novices, professionals or the simply curious will find topics to advance their microcomputer knowledge by attending a series of workshops to be held in Mountain View, California. Sponsored by the Digital Deli, topics now scheduled include: CP/M, dBASE II, SuperCalc, WordStar, Modems, Data Star and Networking. Fees will generally be $30 for each 2 hour session, $45 for each 3 hour session and $60 for the 4 hour session. Workshops will be held Monday through Thursday evenings from 7 to 10 and Saturdays from 9 to 12 at the Digital Deli training room. For more information contact:

Digital Deli Computer Store
80 W. El Camino Real
Mountain View, CA 94040

Owner's Directory

A Personal Computer Owner's Directory that allows you easy access to other computer owners with similar interests is being offered by Personal Computer Owners, Inc. The directory helps you find people willing to trade information on a number of personal computers including the Osborne 1, Apple II & III, Atari 400 and 800, IBM PC and TRS 80 I and III. Interests covered include: aerospace, business, art, communications, data base management, financial, gambling and games. A table is included to reference interests and computers to their owners. For a free, permanent listing in the directory, send your name, address, computer type(s), interests and willingness to trade information to the address below. To receive the current issue and the issue with your listing, send $9.95 to:

Personal Computer
Owners—Dept. 1L
P.O. Box 426
Feeding Hills, MA 01030

New Bulletin Board

A new 24 hour remote CP/M bulletin board system that specializes in Osborne 1 related information is now operating. A public domain software system is available with all the latest programs for the Osborne. Call Programmers Anonymous, Gorham, Maine, at (207) 839-2337.

UOLISP

UOLISP is a complete programming system for the serious microcomputer user. It implements a large subset of Standard LISP, a proposed standard for portable LISP programs. A version is now available for most CP/M systems, including the Osborne 1.

UOLISP is not just a LISP interpreter, it comes complete with a compiler and an optimizer. The system includes a number of precompiled packages that can be loaded one at a time or in combinations. The system comes with over 100 pages of documentation and retails for $150.00.

Far West Systems & Software
P.O. Box 3301
Eugene, Oregon 97403
(503) 485-5155

High Performer

The *Optima Series,* a new premium line of high performance flexible disks from Verbatim Corporation, has an average life expectancy of 70 million revolutions and a warranty of 17 years. The 8-inch diskettes and 5¼-inch minidisks incorporate advanced technologies and production processes that have improved durability, quality, reliability and recorded data and drive head protection. Priced 45 percent higher than Verbatim's popular Datalife brand, the Optima Series will be packaged in a handy Disk Bank storage/filing box.

Donovan Neale-May
Dudley-Anderson-Yutzy
(415) 966-1412

Space Pirates is Here

The Space Pirates video game for the Osborne 1 is now available. The Osborne owner pilots robot fighter ships to defend a shipment of grain barges from pilfering space pirate hordes. But beware of the arrival of the pirate juggernaut, sometimes called "old laser-breath"!

Space Pirates uses the fast, memory-mapped character graphics of the Osborne 1 for exciting arcade-style action. No additional hardware is required for full two dimensional control of direction, acceleration and laser cannon.

Space Pirates is available from many Computerland dealers as well as other authorized Osborne dealers, or from The Software Toolworks, 14478 Glorietta Drive, Sherman Oaks, CA 91423. Price is $19.95; add $2 for postage and handling.

Multi-line Phone Converter

If you own any of those high-tech telephone accessories such as cordless phones, answering units or a modem, you'll notice they come with only a single-line modular adaptor. This can present a problem. JS&A Products has come up with a solution. They manufacture a multi-line adapter that allows you to plug in accessories and select which of the lines on your multi-line phone that you want your accessory to work on.

The converter measures approximately 2½″×5″ so it takes up little room on your desk. Installation is a snap. Just unscrew the plug-in connector and sandwich the multi-line adapter in between. The price for this handy invention is $49.95. Converter order #(1016CA08 3.00).

JS&A Products That Think
One JS&A Plaza
Northbrook, Illinois 60062
(800) 228-5000

The **First Osborne Group (F O G)** has been formed as a Users' Group for persons using or interested in Osborne Computers and the CP/M Disk Operating System with related Software. Membership is available to any interested party whether or not they currently own an Osborne Computer. **F O G**, the **FOGHORN**, and the diskette library are all supported by volunteer contributions of time, money, and software from all active **F O G** members. Guests are welcome at our meetings at any time (as long as they do not participate in Piracy or copying of Proprietary software), but dues of $24.00/yr in U.S. or $30.00/yr elsewhere are required in order to receive the **FOGHORN**, have access to the diskette Library, or derive other available benefits.

CUT HERE

First Osborne Group (**F O G**) Membership Application Form

NAME: _____
ADDRESS: _____
CITY: _____
STATE: _____ ZIP: _____ COUNTRY: _____
PHONES: _____

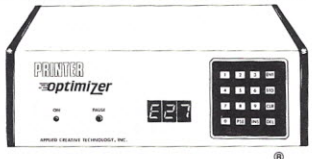
	Yes	No	Maybe
O-1 Owner?	☐	☐	☐
Modem?	☐	☐	☐

INTERESTS: _____

Send the completed application and your payment to: **First Osborne Group (F O G),** P. O. BOX 11683-A, Palo Alto, CA 94306

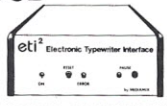
Do You Use a Printer or Modem?

The average microcomputer "moves" data at 120,000 characters a second. A typical disk drive transfers it at 27,000 CPS. Most printers however plod along at 100 CPS and many modems squeak out 30 CPS. That's quite a drop in efficiency not to mention a waste of computing power!



We've broken this bottleneck with a smart little "white" box called the PRINTER OPTIMIZER® that features a 64,000 to 256,000 character memory buffer. Now you can "print" your inventory in 2 seconds instead of 10 minutes, and no longer will your computer be tied up transmitting or receiving modem transmissions. The OPTIMIZER is smart too. You'll notice a keypad and display in our picture. You can tell the OPTIMIZER to convert data, send control sequences, pause on cue, and more. For example: access all of your printer's capabilities (graphics, font size, forms control, special symbols) with the ease of selecting a station on a pushbutton car radio. Use it to adapt an XYZ printer to your ABC computer running a PDQ word processing program. Run a serial printer or modem from a parallel port. If you can afford and justify a disk drive, then you certainly need our OPTIMIZER to bring your printer, plotter or modem "up to speed" with the rest of your system.

If You Need A Letter Quality Printer



...then consider our affordable yet high quality alternative. Our MEDIAMIX ETI²® converts an IBM Electronic Typewriter (and some other brands) into a computer printer. Every office needs a typewriter. So for example, you can buy an IBM Model 50 ET that costs about $1200 and have a superior typewriter, and then with our ETI² have a printer that produces probably the highest quality printed image available. You can even do typesetting like this ad! And for financial printing you can't beat a wide carriage IBM ET. It's a truly cost effective investment. There are a number of arguments in favor of choosing this route over a single use computer printer, and we have an article on this subject you should read.

We apply technology creatively, with insight and with respect for the non-technical end user. Feel welcome to write or call our toll free number for more information.

APPLIED CREATIVE TECHNOLOGY, INC.

2723 Avenue E East, Suite 717
Arlington, Texas 76011
(817)-261-6905
(800)-433-5373

COPYRIGHT 1982

new Products

Stand Alone Modem

Visionary Electronics of San Francisco announce the introduction of a 300 baud programmable microprocessor-controlled modem that operates completely independent of the host computer. It can send and receive electronic mail while the computer is being used for other purposes or even while it is turned off. The VISIONARY 100 utilizes the RS 232 interface and is useable with most business and personal computers, including the Osborne 1.

The VISIONARY 100 includes its own internal real-time clock and calendar: on-board memory (to store messages, lists of phone numbers, or user-defined commands); and totally

ACCOUNTING FOR THE OSBORNE™

GENERAL LEDGER ...avail. now.. $100. Allows up to 200 accounts and 400 transactions/mo (per disk). Keeps and displays concisely mo/end balances for Last Year, This Year and Forecast. Transactions and Adjusting Journal Entries cannot be entered without being in balance. Reports include Balance Sheet, Income Statement, Annual Summary of Last Yr, This Yr, Forecast and Journal Report (provides an audit trail).

ACCOUNTS PAYABLE ..avail.11/30. $100 Allows up to 400 Invoices and 200 Vendors. Records invoices and hand-written checks. Writes computer checks for payables or any other purpose. Allows partial payment of invoices. Check printout format can be changed to use most computer checks. New vendor name and address are easily entered when invoice is entered.

ACCTS RECEIVABLE..avail.12/31. $100 Allows up to 400 Invoices and 200 Customers. Invoices can be entered directly or transferred from Inventory Module automatically. Customer name and address file is indexed for quick access and easy review. Statements can be printed at any time. Partial payments possible.

INVENTORY .....avail. 1/31/83..... $100. Allows up to 600 parts. Calculates shipping costs. Keeps 12 month history of unit sales as well as year to date. Invoicing section can be used as point of sale (prints invoices, handles cash, prints daily summary of activity and cash received.) Reports include Inventory Value and Status, Sales History, Price List, Daily Summary/Monthly Summary.

FREE INFORMATION AVAILABLE

All programs will run on the Osborne. They are menu-driven with very good on-screen instructions. Disks can be copied for back-up.

ORDERING: Please send check or money order with your order. Price includes shipping (MN residents add 5% sales tax). Your order will be shipped to you by return mail. SAMPLE DISK: $15.00 Postage paid. Demonstrates program operation, prints reports.

DEALER/REP INQUIRIES WELCOME

IRONWOOD

115 N. First St., Minneapolis, MN 55401
(612)-339-2520

$1.50, $9.00 for a full year for U.S. subscriptions. International subscriptions higher.

Florida Osborne Group
P.O. Box 1053
Venice, FL 33595

user-friendly communications software. Suggested retail price is $595.00.

Visionary Electronics, Inc.
141 Parker Avenue
San Francisco, CA 94118
(415) 751-8811

News, News, News

The OS/TECH newsletter is published and edited by a Florida Osborne User Group and was designed to pass on helpful information on the Osborne 1 to other users. OS/TECH brings subscribers information about the Osborne that the manual may not cover clearly. For the experienced user there is hard-to-get information from more sophisticated sources. Information is included about new products, software (both retail and private domain) and books. OS/TECH is published six times a year. Individual copies are

New Product information is derived from press releases sent to The Portable Companion by the producing companies. Statements of fact or opinions expressed in the New Product announcements that appear in this magazine are those of the producing company and have not been checked for accuracy by Osborne Computer Corporation. Before purchasing any of the products listed in this section, you are advised to check the validity of all claims made for the product.

OSBORNE™ COMPUTER USERS
WE HAVE THE CONNECTION

CONNECT YOUR IBM SELECTRIC, IBM ELECTRONIC OR OLIVETTI TYPEWRITER TO YOUR OSBORNE COMPUTER.

Turn your typewriter into a printer for less than $600.

ESCON Products, Inc
12919 Alcosta Boulevard
San Ramon, California 9458

CALL TOLL FREE: (800) 227-2148 CA: (415) 820-1256

CVA-1

COMPOSITE VIDEO ADAPTER . . .

lets you connect any standard video monitor to your OSBORNE™ for an easier to see display. Fits all OSBORNES.

Just plug it into your computer and connect your monitor.

Retains HALF - INTENSITY; duplicates all internal screen attributes and internal display still operates.

CVA-1 is small enough to remain installed, even when you pack up your computer!

Just **$34.95** plus $2.50 shipping and handling. (C.O.D. additional $2.50.)

master charge VISA

Dealer inquiries invited.

[Ask about our other products for your OSBORNE.]

integrated systems, inc.
125 Sharon Avenue, Houghton, MI 49931
(906) 482-2305

ENGINEERS!

Put your OSBORNE 1™ to work

PIPE-FLO

The first in a series of Engineering Design Programs

Calculates:
* Pipe Head Losses
* Valve/Fitting Friction Losses
* System Resistance Data for Projects of up to 15 Pipes.

Features:
* Easy Data Entry and Edit
* Reusable Project Files
* Printed Project Reports
* User Customization of valve, material, and pipe tables
* Comprehensive User Manual $275

manual only $20

ENGINEERED SOFTWARE
2420 Wedgewood Dr.
Olympia, WA 98501
(206) 786-8545

The word processing / typeset connection

Barbara Elman

You have just completed "The Great American Novel" and a dozen bookstores are lined up with orders. Your appearances on Merv and Johnny begin next month, but text from your dot matrix printer looks like a *Reader's Digest* form letter! Typesetting is impossible—too costly, too time consuming, too error-prone—or is it?

Now that micros are competing with fancy office word processors to edit your prose, a new kid has appeared on the block and is anxious to play: the WP/Typeset Interface. Offering increased legibility, compaction of text per page, and a more "professional" image than dot or typewriter print, typesetting is now an affordable option for any Osborne user. Up to 50% of the effort to convert text to phototype and 50% of the cost can be cut by working with an experienced computerized typographer and planning ahead. Here's how:

The primary reason for converting text to camera-ready type is to take advantage of the ability to change leading (spacing between lines) by fractions, change type size/width, and change line length/width—all to get more words on a page with a readable, professional look. Until recently it was cheaper for the typographer to re-key every word and space; now it's easier for you to capture the text on your computer and pass it on to the typesetter in one of four ways. (NOTE: not all typographers can interface with word processors; consult those in your area to find out which methods they can work with and how best to use them. If none of them can interface with your Osborne, there are firms who specialize in long-distance work noted at the end of this article.)

These methods are: direct media-to-media interface, telecommunication via phone lines or database interception, direct compatibility, and optical character recognition devices. More computerese! How do these work?

Direct media-to-media interface works by translating your text direct from diskette to the format/storage method readable by your typesetter's computer. This can be done at the typographer's shop or sent to a third-party conversion service. Just as an Apple diskette still can't be read by your Osborne, good ol' Ozzie and your typographer's computer don't speak the same language. But with devices like the *Shafstall Media Comm,* a mulit-disk reader, your diskette can be copied to your typographer's format in a few minutes. Most function and text format coding should translate along with the text. This is an extra service beyond outputting phototype, so ask the rates in advance (usually calculated in characters/cents). Once converted, your text now resides on both your diskette and the typographer's for future revisions.

Telecommunications is the simplest and usually most cost-effective interface today. It does require extra devices on both sides of the phone—a modem to translate your text into phone-transmittable beeps and convert them back to computerese at your typographer's end of the line, as well as communications software. A 300 baud rate (sending 30 cps) is enough for short documents like newsletters, but 1200 baud is recommended for longer works, cutting transmission time/costs.

Make sure you provide hard copy to your typesetter for comparison, as "noisy" phone lines often interfere with clean transmission. Budget some time and money for this double-check as well. If your typographer is not local and you subscribe to The SOURCE or CompuServe, he may prefer to receive data via the database's clean local access lines and save on long-distance charges.

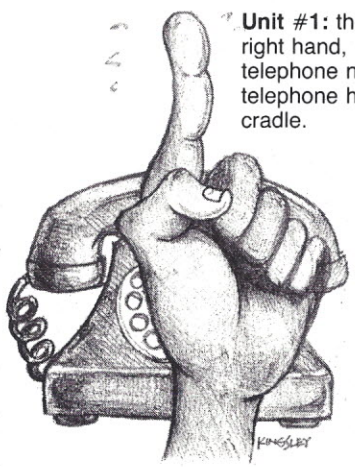
Direct compatibility (where your typographer's computer reads your Osborne diskette) is the least common interface today and not yet possible from Osborne format. You may, however, be able to carry your portable Ozzie to your typographer's studio, plug it into his system directly via RS232 or IEEE-488 connections (probably through a multi-port connection device many typesetters already use), and PIP over text via CP/M. This is a good way to insure clean interface and also fun to watch—*if* your typographer knows his way around computers and has equipment to handle this delicate marriage.

Optical character recognition is an ideal concept in theory, but less than perfect in use. Exceptionally clean, perfectly formatted text scans best, and typesetters find it difficult to get this high-quality copy from most customers. In essence, an OCR device takes hard copy, reads it via a scanning "window," translates text and formatting to electronic signals, and writes it to disk for the typesetter. Typeset codes can be included with text as well. (You can also write typewritten text to disk for your word processor this way.)

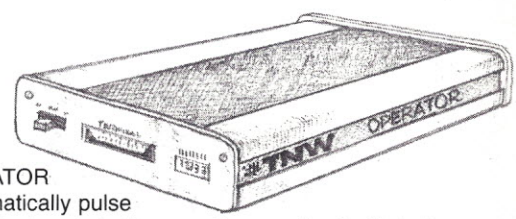
A special font (OCR-A or OCR-B) may be required, but these are available in Selectric elements and word processing daisywheels. Some OCRs can read Selectric typefaces (Courier, Prestige Elite, etc.) and one magic machine reads almost any words on paper, even handwriting! The *Kurzweil Omnifont Reader* can be "taught" to even read text that has previously been typeset (meaning you can convert copy that was typeset before you got your word processor to disk for re-editing/updating now!). Setup and learning time is required for each typeface, so again, check costs before you budget.

With any of these methods, you will save operator intervention by having the typographer design a *coding* system which you input while composing or editing. This is a symbol/mnemonic combination to instruct the typeset computer when to change typestyles or sizes, whether to italicize or boldface, when to change paragraphs and how much leading to insert between lines, etc. After a discussion of your needs, your interface-experienced typographer can set this up quickly from a sample of your text. Once you are proficient

Digital Dialing Units For Your Acoustic Coupler

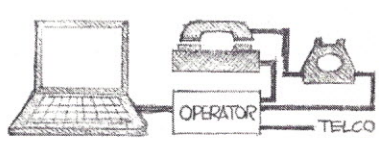


Unit #1: the index finger of your right hand, used to manually dial a telephone number and place the telephone handset in the coupler's cradle.



Unit #2: TNW's new OPERATOR Automatic Calling Unit, automatically pulse dials under computer or terminal control. Also provides unattended telephone answer capability. Use it with your acoustic coupler or most direct connect modems. 110 to 300 bits per second, powerful command interpreter, RS-232 interface to computer or terminal. Complete with power supply, cabinet, documentation, and full one year warranty for only $129.

TNW CORPORATION Dept. 9
3444 Hancock Street, San Diego, CA 92110
(619) 296-2115 • Telexll 910-335-1194



FILE TRAN™

CP/M → CP/M®

TRS-80 → CP/M®

DISK → DISK

FILETRAN™ operates on a single computer and file transfers are accomplished in seconds, not hours. A variety of other features are built into FILETRAN which complement and support file transfer operations. FILETRAN™ for the OSBORNE 1™ is the most exciting new system tool on the marketplace today!

only **$99.**

DEALER INQUIRIES INVITED

See your local Osborne dealer for a demo or contact:

Format problem solver?
Increase productivity and lower cost?
Larger choice of software?
Expand my marketplace?
Transfer from "alien" CP/M® formats AND from TRS-80®?
Retain my old software? No retype of text files?
All this WITHOUT telecommunications equipment?
Now I can do this myself?
?'s all "YES" with FILETRAN™

CP/M®, TRS-80® trademarks of Digital Research, Tandy Corporation.

BUSINESS MICRO PRODUCTS

311½ 8th Street
Suite 400
Glenwood Springs, CO 81601
303-945-8166

Shipping $3 USA/$10 Foreign COD add $2.50. Colorado residents 3% sales tax, all prices subject to change.

VISA master charge

THE ORGANIZERS

COMPUTER STAND

- Keeps desk clear for you and your work
- Keeps the screen elevated for reduced glare and less eyestrain
- Your system disks and user manuals are kept within easy reach on a handy built-in shelf
- Area is available under the shelf for computer related supplies– Out of the way, out of harm, and out of sight!
- The best computer organizer made is yours for . . .

$29.50

PRINTER STAND

- Allows a full four inches of paper to be stored under the printer
- Built-in shelf provides space for manuals
- Sturdy and rugged, the finest printer stand available is only . . .

$27.50

Durable high impact, textured plastic organizers are available in Glacier White or Basic Black. Please specify color.

APOGEE DESIGNS LTD.

Send check or money order to: **Apogee Designs, Ltd., 3100 Fallscliff Rd., Baltimore, MD 21211, Phone (301) 235-7523.** MasterCard and Visa accepted. Add $2.00 for freight per unit to anywhere in the Continental U.S. 5% sales tax for Md. residents.

the Processed Word

at coding, any set-up charges will be offset by the savings you gain by interfacing to typeset instead of rekeying.

Now for the bad news: despite the technological advances and cost/effort advantages, interfacing is not always the best way to typeset your copy. There are some limiting factors and occasions where the old-fashioned route is still the best approach. Clean, straight text with simple and or repetitive format changes,, such as magazine or book copy, makes for the most successful interface. Directories where a basic format is repeated uniformly despite format/type changes within paragraphs are also good candidates. However, it is faster and cheaper to set charts, statistical and columnar copy directly.

Some subtle incompatibilities of software can also make interfacing difficult. Methods of storing media on diskette differ from system to system (sectors, single/double density, etc.), so in some cases it is better to telecommunicate text rather than convert a diskette to typeset.

A more common stumbling block is the translation of internal programming codes between different operating languages. This still occurs among micros (Apple vs. TRS-80, CP/M vs. IBM-PC), so it is easy to understand how this affects typesetting conversion. Sometimes *only* the text transmits cleanly, with formatting instructions (tabs, returns, indents, centers) requiring manual insertion by the typographer.

Translating normal word processing operations into standard typeset forms also takes some preplanning. Typeset uses italics instead of underlining, a single "space" between sentences instead of two, an "em" space at the beginning of paragraphs instead of a tab. Most typeset computers strip out or change these "standard" functions from word processing mode, but inputting with this in mind saves effort later.

Again, discuss the differences between typing and typesetting with your now-friendly typographer.

In budgeting your project consider that typesetters all have base prices for interfacing operations, code set-up and final phototype layout, but your final bill may be higher than the estimate due to the individual needs of the job. Find out in front how to minimize costs and delays so that the bottom line doesn't grow beyond your means due to poor planning and last-minute changes.

To find out about typesetting my newsletter for computerized writers, *W.P. News: A Writer's POV on Word Processing,* I spoke at length with Jim Jones, owner of I/OCR Typesetting in Glendale, CA., and a pioneer in the WP/Typeset Interface. Approaching typography from a data processing background, Jim immediately saw the potential of microcomputers for typeset input. We estimated the cost of typesetting an issue of *W.P. News* by interfacing my Osborne 1 with Jim's equipment. Then we tested direct transmission from Ozzie to his Vector Graphic Word Processing system, whose diskettes are compatible with his AM Comp/Edit typesetter, using the RS232 and CP/M compatibility of Ozzie and Vector Graphic. I was hooked!

Jim set up simple codes for type changes based on WPN Issue #2, and we decided that if I batched headlines, quotes and other non-standard text, and Jim's operator input the masthead and table of contents, the cost would be 50% less than keyboarding it all at I/OCR—an impressive savings! This included an hour of operator input/proof as well. Turnaround time was projected at 48 hours, and I would do the layout myself although, like many typographers, Jim could give me laid-out camera-ready copy.

Jim also recommended other Osborne users talk with potential typographers to insure compatibility before getting started. Any typographer who really want to reach word processing users will invest some "free" time building future business. His strongest advice, however, was to tell any typesetter who claims he can interface easily: "SHOW ME!" Also, get references of other customers they have worked with to find out how it went from the word processing end of the line.

The number of interfaceable typographers is growing quickly, although many typographers still use equipment unable to connect with yours without disk coversion. *TYPEWORLD* (15 Oakridge Circle, Wilmington MA 01887), a newspaper for the word processing typeset and graphics industry, supplemented their March 26, 1982 issue with a *Directory of Communicating Typesetters.* Priced at $5, this supplement lists a wide variety of typesetters and their equipment. The 1983 annual directory should be available next spring.

Other resources I have heard of but not talked with include: *Conversion Services*—Datascan, Santa Monica, CA; Altertext, Boston MA. *Interfacing Typographer*— Techni-Process/Computer Press, Los Altos, CA; Dream Electronics, Corvallis OR; Johnson & Smith Typesetting, Glendale, CA; Phoenix Studio, Philadelphia PA; Arts & Letters, Brookline MA; DynaType, Glendale CA; Grossman Graphics, Philadelphia PA; Intergraphics, Alexandria VA; and TypeShare, Downey CA. They each offer long-distance service via disk conversion or TC, and some allow payment by credit card. Call or write for brochures and rates.

Dirck Holscher of Electronic Publishers Technology Group (PO Box 3568, 1200 29th St. NW, Washington DC, 20007) also offers interfacing to typeset (as well as OCR) and has been educating typesetters via excellent national seminars (write for schedule). He has also written a useful monograph on the subject for the National Composition Association; contact him for details.

So although computer printers are becoming more affordable and offering better quality output than before, there are still occasions when typesetting is what you need. Knowing your Osborne can become a typesetting terminal and even travel to the typographer's studio in a pinch makes this previously painful task as simple as word processing itself.

Barbara Elman publishes a bimonthly newsletter for computerized writers of all types, which includes a column for Osborne users (W.P. News, 1765 N. Highland #306, Hollywood, CA 90028; $2/sample; $24/year). She also consults and speaks to writers nationwide on computerizing the creative process.

OZGUARD

BY **WESTWIND**
PATENT PENDING

WATERPROOF
WASHABLE

$60 BLUE
BROWN
BEIGE

3 LARGE POCKETS FOR:
— MANUAL
— MODEM
— MISC

WESTWIND
484 Lakepark Ave., No. 141
Oakland, CA 94610
(415) 839-7169
(DEALER INQUIRIES WELCOME)

KELLER CONSULTING CORP.

T-PILOT

KCC's implementation of the popular instructional language PILOT provides the CP/M system programmer with an extremely versatile means of creating computer aided instructional programs. The simple syntax of T-PILOT provides an excellent introduction to elementary programming techniques to the novice as well as providing the experienced programmer with an easy means to construct interactive programs. T-PILOT's powerful string-matching feature allows for convienient programming of the "Question/Answer" type of instructional program. Also included are sample programs and a comprehensive documentation package.

KCC T-PILOT.....$39.95

LUCIDATA PASCAL

POLYBYTES' versatile implementation of Lucidata's field-proven Pascal system provides the CP/M programmer with a powerful language system which is fully compatible with his/her current operating system. Pascal's data structures and programming constructs combined with Lucidata's 9-digit REALs, and extensions such as program chaining and random disk file access, give this system the sophistication to handle the most complex programming tasks.

LUCIDATA PASCAL VERSION 3.8.....$145

KCC's products are available for CP/M version 2.0 and higher, and can be shipped on Osborne's single-sided, single-density format. (CP/M is a registered trademark of Digital Research Corporation.) Send check or money order to:

KELLER CONSULTING CORP.
BOX 163
VINTON, IA 52349

*** SYSTEM DEFINITION 319-472-2842**
*** CUSTOM HARDWARE 319-369-9154**
*** CUSTOM SOFTWARE**

OSBORNE I™◄►MX-80 PARALLEL PRINTER CABLES $35

Connects Osborne 1 IEEE Port to MX-80/Centronics type parallel printers.

Order part no. 0-1—$35

—FREE SHIPPING
—10 DAY FREE TRIAL
—CUSTOM LENGTHS AVAILABLE

Visa & Mastercard
Texas residents add 5% tax.
C.O.D. add $2.

AUSTIN COMPUTER TECHNOLOGIES

Dept. O, P.O. Box 26595
Austin, TX 78755
(512) 835-6136

reviews

Starting with this issue of *The Portable Companion,* we'll be presenting user reactions to software, hardware, and peripheral products for the Osborne 1 computer.

Osborne Computer Corporation cannot endorse any product. To do so would be a violation of the philosophy with which this magazine was started. Therefore, let us state the rules and caveats by which this section of the magazine will operate.

1) The reviews are the opinion of the author only. If you disagree with an opinion, send us your own—we will publish, within reason, multiple reviews of the same product.

2) OCC edits the reviews only for grammar, spelling and libel. In the case of a negative review, we offer the producing company an equal number of words for response. We cannot be responsible for misrepresentation by either party. As always, we ask the reader to verify information printed here before using it as an integral part of your purchase decision.

3) Anything goes. Pick any style you want to write your review—poetry, prose, parody—you name it. Be creative, but remember the intent of your mission in writing a review: to tell others what you think of a product and why.

Enough said, on with the reviews.

Trantor 10-megabyte Hard Disk Drive: When I was first told that you could hook a hard disk drive up to the Osborne, I responded with a flat "you're nuts." As usual, I was proven wrong.

I've had the first Trantor hard disk drive for about nine months now. Yes, friends, I've been basking in megabytes (10) of disk storage space. Indeed, I've never managed to fill the space. For me, the Trantor has proven to be a black hole of bytes.

First the facts: The Trantor comes complete with software and cable to hook to the Osborne. Simply follow a few instructions in the supplied manual and you're going. I've configured my hard disk drive to be two logical drives, A and B, with the floppies becoming Drives C and D.

Trantor Systems includes a file archive utility that allows you to backup the files on the hard disk drive onto floppies. Currently, I have 22 floppies used in the backup process, which takes about 35 minutes.

Next, the advantages: The Trantor gives you two basic advantages, speed and space. The drive is not lightning quick—I've seen faster—but it is fast. I bounce around from program to program with nary a wait. The space you already know about.

Finally, some comments: I've crashed the system three times, erasing all the files off the drive! All three times were my fault—I didn't follow instructions or I was stupid and attempted brute force changes on the drive without knowing what I was doing. Since I back up my drive only once a week, I lost some files each time (plus the time in resurrecting everything), but I have no one to blame except myself. If I had been more careful in backing things up or had not "played around" with the drive so much, I wouldn't have had those problems.

I've also used a Corvus hard disk system at work. The Trantor is a little faster by my benchmarks; the Corvus supports multiple users. Both make about the same amount of noise, although the Corvus seems to throw off more heat. The Trantor is less expensive, with $2995 the price for a complete 5-megabyte drive, $3495 the price for the 10-megabyte system I own.

Having a hard disk drive spoils you. I like the way the Trantor has spoiled me. **Thom Hogan**

Osboard 1: Although I am a very satisfied Osborne 1 owner, I came very close to not buying my machine. While the features, portability, and price appealed to me, the lack of high-resolution graphics capabilities almost steered me towards one of the

competing machines, such as Apple or IBM. Ultimately, I bought an Osborne in spite of this handicap, largely because I didn't have the $3000 that would have been necessary to match the Osborne's features in a different machine.

One night at an Osborne Santa Barbara Users Group (OSBUG) meeting, Dave Grenoweitsky, a software designer, demonstrated the *Osboard 1* program that he had written. I was ecstatic. My little "business" machine, which I had thought so limited in terms of visual displays, was actually capable of generating impressive graphic patterns! All that was needed was the proper tool for putting those graphics characters on the screen, and *Osboard* was obviously an effective tool. I bought a copy immediately.

Osboard 1 is actually a package of several programs, each with a different function. With the package, one can access both graphic and alphanumeric characters; create, edit, and save screen images; merge a screen image with other programs; and print the images on one of several popular dot matrix printers. It's very easy to use—on-screen instructions are available for each of the programs—and the user guide is one of the clearest and most thorough I've ever seen. The price is right, too (about $50).

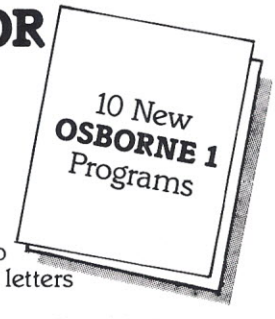
OSBOARD.COM, the cornerstone of the software package, contains three basic options: create or edit a screen image; read a picture from disk; and save a picture to disk. One creates an image by moving the cursor around the screen using the numeric key pad and pressing appropriate keys at desired screen locations. The user can place alphanumeric characters or one of the 32 Osborne graphics characters at any desired location. In addition, you can select either bright or dim intensity, with or without underlining. Saving a completed image is very easy. You merely return to the menu, press the appropriate menu selection and answer the "file name?" prompt.

Osboard disk images are stored as data pairs, with two data values for each screen position. The first data value gives the ASCII value for the character, while the second represents the intensity (bright or dim). Using a second Osboard program, CONVERT.COM, a screen image can be converted to data files for use in either MBASIC, CBASIC, or assembly language programs. In this way a diagram, chart, or logo can be included in any user-written program, and created in a fraction of the time that would otherwise be required.

Finally, for those who like hard copy images and own one of the popular dot-matrix printers (Epson, IDS, and NEC are supported at this time), the program MXPRINT.COM can be used to print the screen images. The printouts are faithful reproductions of the screen, except that white and black areas are reversed. This was done intentionally to save printer ribbons; rather than darkening all background areas and leaving the drawn image white, only the image itself is printed (gray areas on the screen are printed as gray, however).

Osboard 1, by allowing easy access to the Osborne's graphics characters, greatly enhances the usefulness and versatility of the machine. Any Osborne user interested in exploring the computer's graphics potential should seriously consider this fine program. **George Taylor**

FREE CATALOG OF NEW SOFTWARE FOR OSBORNE 1*



Describes easy-to-use software for business applications: like our low-cost SPELL program that instantly converts your word processor into a spelling error locator. (No more embarassing mistakes in letters and reports!)

Lists software designed for pure fun: like ELIZA—a robot "psychiatrist" that dispenses hilarious pseudo therapy. Great for parties.

Presents languages for advanced programmers: like C compiler, LISP, RATFOR, 8080 and Z80 macro assemblers.

Heath/Zenith and 8" CP/M* owners: catalog also lists 21 programs for your system.

Call or write for your free Software Toolworks catalog.

*OSBORNE 1 is trademark of Osborne Computer Corp. CP/M is a registered trademark of Digital Research.

The Software Toolworks™

MasterCard

14478 Glorietta Drive,
Sherman Oaks, CA 91423
(213) 986-4885
Dealer inquiries invited.

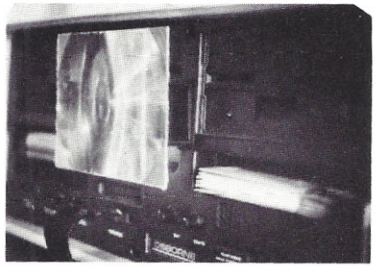
VISA

THE OSBORNE'S SCREEN JUST GOT BIGGER

AS AN OSBORNE OWNER, WHEN DID YOU LAST HEAR: "HOW CAN YOU STAND THAT SCREEN — IT'S TINY"?

Well, your tiny screen just got bigger. About 50% bigger, actually. COMSOL, the computer solutions company, has just introduced a screen enlarger for your Osborne Personal Computer.

Like the Osborne 1™, the Screen Enlarger is a high quality product at a reasonable price. It's also portable. Just $19.95, complete.



COMSOL
P.O. Box 206, Pt. Richmond, CA 94807

Name _____

Street _____

City/State/Zip _____

Calif. Residents add $1.30 Sales Tax
Money back guarantee

SOFTWARE FOR THE OSBORNE

APPOINTMENT CALENDAR SYSTEM $80.00
Maintain your personal or business appointment calendar with this amazingly flexible system. You define how many people the system is to manage; which days of the week, hours of the day, and intervals within each hour are to be used. Includes automatic posting to multiple times and days, printouts, and many other features. Runs on single or double density or hard disk systems. Complete instructions included.

CASINO BLACKJACK $25.00
Realistic simulation of casino play. Before play, you select options to duplicate the rules of any casino: number of decks, insurance wager, double down. Includes pair splitting. Card counts show on demand.

Order from:
MARATHON COMPUTER SYSTEMS, INC.
P.O. Box 1527
San Mateo, CA 94401
(415) 340-1756

reviews

(George Taylor is a microcomputer consultant from Santa Barbara, California.)
(Osboard 1 will soon be available to all Osborne owners through the OCC approved software program.)

Superfile: Over a period of many years as seller and supervisor of sellers, I have come to believe that the greatest weakness in marketing systems is giving the salesperson the responsibility of deciding, "What do I do next?" The answer all too often is, "Go to the movies, ball game, park—ANYTHING BUT FACE THOSE COLD CALLS."

Have you ever driven by a big-city park on a nice summer day and noticed all the cars parked there, with one occupant each? Betcha your next bonus most of said occupants are supposed to be out selling something! And that's where the Osborne and *SUPERFILE* can help.

I spent 1963 to 1977 running a Chicago-based manufacturing company. Our most persistent problem was kicking the salespeople in the tail, encouraging them to keep making that next call. We tried all the usual tactics: big reports, little reports, bonuses, contests, commission increases, commission decreases.

We sold the company shortly after moving to Boulder, Colorado. After a few false re-starts, I fell into the salesman's dream. What I do is offer merchants MasterCard and Visa processing, cheaper and better than they're getting it now.

However, now that I'm the sales manager AND the salesman, I am concerned with my own efficiency. I found myself spending selling time in the computer stores (I did sign some of them up on our bank card program.), pleading with them, "Don't you have a program that answers, 'What do I. . .'?"

Finally I found it!—SUPERFILE.

Unlike other data base management systems, *SUPERFILE* lets me enter my information in the format and length I want—some for some customers, more for others, less for still others. Also, it doesn't cost a bundle, only $195. As you may have discerned by now, I don't part with money easily. *SUPERFILE* is produced by FYI, INC. of Austin, Texas, and is available at most major computer stores.

Perhaps most important, and unlike most of the other software companies, FYI, INC. offers a full refund on the fully operational program for 30 days after purchase. That's my kind of deal—"Put it on my Visa." Here's how I use *SUPERFILE:*

I enter the name, company, address, and phone number of everyone I have contacted who might be a prospect for our service in the future, along with any relevant information about him. Using *SUPERFILE's* "key words", I index the contact by his name, his company's name, his location, his type of business, and most important, by the date I want to contact him next. I update this information after each contact, and make new entries as appropriate.

SUPERFILE lets me use 250 key words to cross-index each entry in my data base. A single data base can have up to 3000 key words—if I can think of that many. On my single density Osborne 1, I can store about 2,500 entries in a single data base, and as many data bases as I need. Each entry can be many pages long. *SUPERFILE* allows me to keep the data for a single data base on as many as 255 separate diskettes, so the capacity is tremendous!

If today is a "phone" day, I enter the date, which brings today's calls onto the screen. Using other key words, I can bring up other prospects who may not have originally been scheduled to be contacted today. As I call them, I make notes on a blank sheet of paper for later entry into the file.

If today is a "car" day, I print out my list of calls, leaving room for comments and cold calls. When I get

home, I update from my notes and file my call sheets by date.

The main advantage to using *SUPERFILE* with my Osborne is that I now know "What do I. . . !" *I can find the information that helps me make sales.* With this sytem I am better prepared for each contact. More time is spent with the prospect, and less in unproductive tasks. I no longer have to worry about lost notes and missed contacts, and I know exactly what I need to be doing during the day.

Jay Hearst.

KayPro

This is Osborne's big competition. Hardware has a lot going for it. The screen is a green, 80 column 9″ monitor, a real selectric layout keyboard, double density drives, coiled modular-telephone-type keyboard connector wire. Z80 with CP/M and printer connections are at the rear. $1790.00.

Included software is the *Select* word processor with a spelling checker package and self teaching program; some kind of spreadsheet; CP/M and *S-BASIC.*

Things begin to break down.

I hate the ugly metal case. The keyboard housing is metal too, and if you like to rest your hands on the keyboard like I do, you find that it draws a lot of heat out of your hands, making your fingers rather stiff.

Select.

Select is. . . . something you must experience to truly hate. Although it is very easy to learn it is clumsy to use. For example: if while entering text you discover that you need to change a character in a word in the last sentence; you have to exit the insert (text entry) mode, save the text you are entering, go to edit mode and correct the word you want to fix, exit the edit mode, save the correction; reenter the insert mode and continue with your text entry. It is a great deal less logical than doing a single character insertion in *WordStar.*

Select is so bad Non-Linear Systems is dropping the system in favor of a total newcomer: *Perfect Writer.* The "Perfect" series includes a spelling checker and a spreadsheet which seems a bit ambitious to me. I must confess to a great deal of doubt over any software product from a totally new source that calls itself "Perfect."

Turn your Osborne into a

SUPERCOMPUTER

with the

Design One Hard Disk Drive

Give your Osborne* the power and "I-O" speed to support your full creativity with the Design One Hard Disk Drive. Process words and data more rapidly than any similar disk on the market, with greater convenience and reliability.

- **Portable** Winchester hard disk
- **Protects your data**
- **Fastest available**—70 millesecond seek, 512 byte sector
- Available in 5 to 20 MB at **discount prices**

Call 202-775-8400

Satisfaction assured by
ProMicro, Inc.
Professional MicroSystems for Supercomputing
Suite 1000
1100 17th Street, NW
Washington, DC 20036

* Osborne 1 is a trademark of Osborne Computer Corporation.

only $29.95

Interactive Graphics and Moving Text

- Super large moving marque messages
- Full screen editor for both graphics and text
- Store and display files of intermixed messages and graphics
- Interface provided to user written programs for messages.
- Business-Video aid at demonstrations, seminars, and advertising applications
- Education-Help teach spelling, grammer, and sentence structure
- Entertainment-Display files of pictures and messages

only $15.95

Alpha Ed

- Help teach anyone the ABC's
- Changeable word definitions
- Graphics make learning fun
- Built-in scoring

Both for only $35.95

Both programs are 100% menu driven. Knowledge of programming language **NOT** required.

- **Osborne 1™ only!** Postpaid (Wis. residents add 5% sales tax) Allow 30 days for delivery

Osborne 1 is a trademark of the Osborne Computer Corp.

ADAM inc.

P. O. Box 451
Waukesha, WI 53187

SOFTWARE FOR OSBORNE 1™

SBACOUNT: Accounting for small business. Tracks all income & outgo, prints checks, posts chart of accounts. Prints chart of accounts, trial balance, profit and loss statement, & check ledger. Reconciles and prints reconcilation. Generates an Income & Expense journal for audit purposes. **ONLY $79.00**

MBACOUNT: Accounting for small business. Full general ledger (20 asset, 20 liability, 20 income, 30 expense & 10 capital accounts all user assigned) PLUS all the features of SBACOUNT as above. **ONLY $89.00**

PROFBILL: Automatic bookkeeping & invoicing for Doctors, Lawyers and other professional people who invoice at various hourly rates. Will handle up to nine partners/employees. Prints invoice or saves for future billing. **ONLY $89.00**

MAILLIST: Mailing list, customer handling, filing program, ten data fields per customer. 8 character cust # - user (or dated program) assigned, sorts by most fields, Add, delete or modify any record. Prints all or part on 1, 2 or 3-up labels on 80 column printer. **ONLY $89.00**

$FINANCE: Personal financial program. Prints checks, posts amount to selected budget catagory, posts debits and deposits, prints check ledger, reconciles and prints reconciliation statement. Similiar program for charge cards. Extracts and prints list of expenditures in selected budget catagories. **ONLY $79.00**

TOUCHTYP: Touch typing course, Beginning, Intermediate & Advanced. Tests and displays typos and displays final score. **ONLY $79.00**

STANFORM: Need to fill out standard or non-standard forms? This program generates programs for printing data in the proper location on invoices, gov't forms, insurance claims, any form that will fit into your printer. **ONLY $79.00**

MSBCHART: Prints MICROSOFT BASIC programs, prints cross reference list of all referenced lines, prints list of variables cross referenced to each line where used. A godsend if you modify or debug Mbasic programs. **ONLY $79.00**

Price includes disc, manual, and shipment next working day by first class mail. Mail in your order today or request detailed program listing. Better yet, if using accepted credit card, phone your order or data request to our 7 day, 24 hour phone service. Californians must add 6% to all prices.

MAP

(Visa, Mastercharge & American Express cards accepted)

(Micro-Art Programmers) **Innovative Man/Machine Interface**
173 Birch Avenue Cayucos, California 93430 Phone: (805) 995-2329

OSBORNE 1™ is a trademark of OSBORNE COMPUTER CORP.
MBASIC® is a registered trademark of MICROSOFT

reviews

I have yet to see any reviews on this mysterious software. . . many months after it has been announced. . . and local dealers to whom I have spoken have yet to see it shipped.

WordStar on the other hand is THE most popular micro computer word processor, and it has been out a number of years. It has long ago gone through the diaper stage and a couple of major revisions. That should be considered quite significant. I have used better systems on Mini-computers and dedicated word Processors, but not on Micro's.

I heard that the Z80 on the KayPro runs at 2 Mhz where the Ozzy runs at 4 Mhz. I don't know if that's true or not, but the screen acts a lot slower than the Ozzy.

The KayPro screen is larger than the Ozzy and it's green too, which is nice. The characters however are poorly formed and downright hard to read. Frankly I didn't fully appreciate the clarity of the Osborne's screen until I saw the KayPro.

The machines are still being "hand built" according to one dealer, which he implied was an advantage. I don't think so, because if repairs are ever needed, a "hand built" unit could be a bear to fix if the rest of the unit population is well built by mass production. ALL of the chips on the KayPro's master board are in sockets, making me wonder about the reliability of literally thousands of friction electrical contacts in a portable computer.

Interestingly, I heard that Non Linear Systems will make absolutely anyone a dealer if they buy as few as five units. No qualifying, no service department requirements. Just buy five units.

The KayPro also has about one half of the profit margin for the dealers that the OZZY offers to keep the retail price competitive with Osborne. That leads to under-enthusiastic dealers, and more likely than not, less service after the sale.

Scott Rainey, OSBUG

Were you "Bugs" Eugene

Charles E. Moller

Eugene-would you feel a
Different dynamic—
In my now?
Would you freshen
In micro baudian synchronization
Re-calculate-replicate?

Or is a pervading
Image, true or false,
An hard wiring shadow
Image of the greater
Reality in the mind of
The Dreaming God?

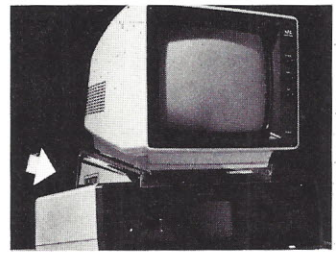
Was yours a RAM
A transient program
Under the
CREATE MODE of
Your Father's
Drive and Your
Mother's KILL or ERA
COMMAND Or Your
Brother's DELETE or ERASE?

Or was yours
Some more complex combination
Of Environmental GLITCHES
Some subtile
Defect in your BIOS

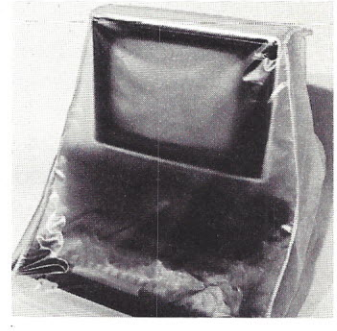
That Made your vision
And You
EXECUTE in

MORE SAVINGS FROM MONTOP®

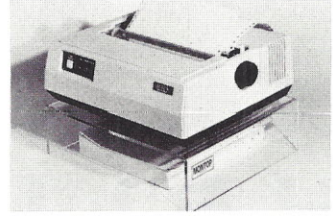
Osborne™ accessories and software



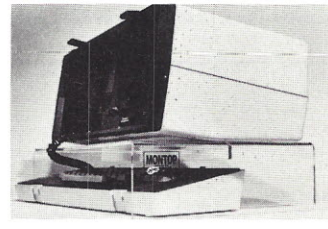
MONTOP MONITOR STAND
Custom stand holds monitor firmly on top of Osborne and lifts monitor off vent of newer model. Saves desk space and places screen at easy-to-read angle. Only $21.95.



ONTOP DUST COVER
NEW!
Protect your investment with durable, clear vinyl dust cover. Osborne and monitor $15.95. Osborne only $13.95. Available in clothbacked leather look for $4.00 extra.



PRINTER STANDS
Stores paper under printer. Keeps paper straight for smoother feedthrough. Sturdy and attractive.
Small size (MX-80, OKI 80, 82, etc.)–$29.95
Large size (MX-100, OKI 83, 84, etc.)–$34.95



DOUBLE DECKER
Lifts computer for better viewing of small screen. The keyboard tucks underneath when finished. This spacesaver is reinforced for extra sturdiness. $34.95.

SOFTWARE

HexPrintR™ by C.I. Software. Popular tool enables user to access full printer capabilities through WordStar®. Easy to use and a valuable productivity investment. Only $38.00

Timin FORTH Release 3 by Timin Engineering Company now available for Osborne. Includes Floating Point Vocabulary, Visual Editor and CP/M Utility Package. $249.00.

(WordStar® is a registered trademark of MicroPro Corp.)

SGW ENTERPRISES, P.O. Box 1015, Del Mar, California 92014 714-755-8324

Please send me:
Quantity Item
____ _____
____ _____
____ _____
____ _____

Total amount enclosed $____
Add $2.50 shipping & handling per item. CA Residents add 6% sales tax.
☐ Please send catalog

☐ Check enclosed
☐ Money order enclosed
☐ VISA/MASTERCARD # _____
Expiration Date _____
Signature _____

Send to:
Name _____
Address _____
City _____
State _____ Zip _____

80 and 100 COLUMN VIDEO

THE RESEARCH ASSOCIATES introduces a video system as an add-on to the Osborne 1.* The system will provide the versatility of an 80 or 100 column video screen format on an external monitor without loss of Osborne 1's video capabilities or speed.

★ The **TRA** video system enhances Osborne 1's video capabilities by providing:

80 character by 24 line window into a 128 character by 32 line video format

100 character by 24 line window into a 128 character by 32 line video format

soft scrolling

reverse video and blinking of the video display

composite and TTL video monitor outputs

★ Connection is easily made by any Osborne 1 user. Simply plug into the IEEE port and into your external monitor.

★ Parallel printer connection is not forfeited. Plug your printer into the TRA parallel port and begin normal printer operation.

★ The operating system set up procedure is easily accomplished by a one-time, automatic disk configuration process. The driver software is supplied by THE RESEARCH ASSOCIATES.

★ Information, specifications and price are available by writing to:

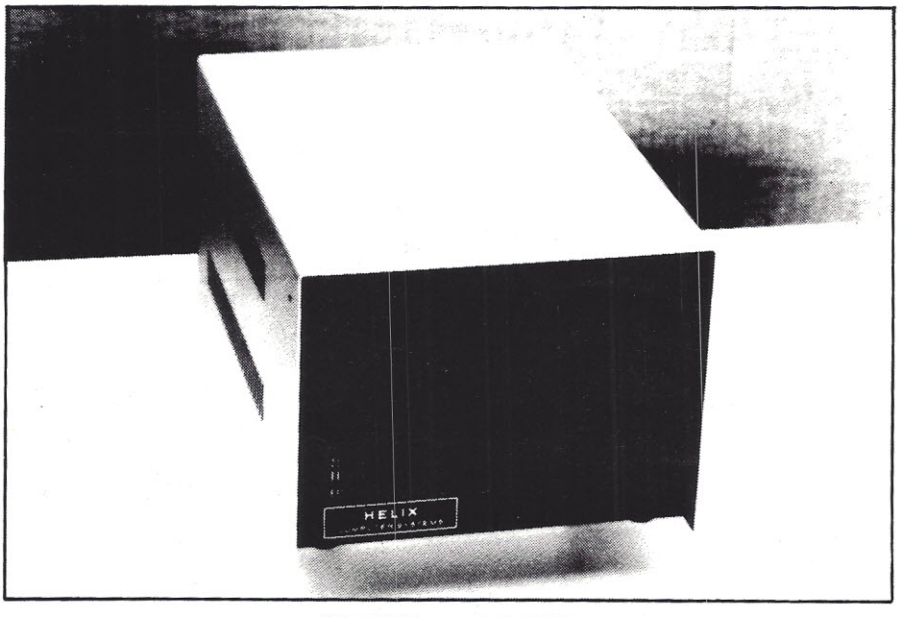
THE RESEARCH ASSOCIATES • FOREST HILL • DUNSTABLE, MASSACHUSETTS • 01827

*Osborne 1 is a trademark of Osborne Computer Corp.

HELIX

Winchesters Now Available For The Osborne 1™

- Z-80 adaptor card leaves external ports free and increases the speed that your information is displayed



- Easy to install
- Easy to follow instructions
- Ribbon cable disconnects for portability

10 MB
$3,000

5 MB
$2,500

15 MB — $3,500

MICRO COMPUTERS OF NEW ORLEANS 4539 I 10 Metairie, La 70002
504 885-5883 800 535 8813

CalcAids

Illustrative SuperCalc

J. R. Garfield

In the early 1960s computers were amazing even though a 16K machine was as big as a large refrigerator. If computing machinery was amazing then, today computers are truly incredible. Each of us can have a completely portable model many times more powerful and reliable than these early devices.

The new economy of computers has opened the door to unprecedented opportunity in finding new ways to make computers useful. The electronic spreadsheet programs that began as a bright idea in a Harvard business classroom have created so much demand that they have driven down the price of computers, making them truly affordable. One of the most advanced and highly-rated versions of this type of innovative spreadsheet program is *SuperCalc*.

The purpose of this CalcAid is to help learn and perhaps discover some interesting aspects of *SuperCalc*.

Since examples are the easiest way to illustrate the various *SuperCalc* features, let's generate a useful one. You are a sales manager for Flinkies, Inc., and would like a weekly ranking of your sales staff. Can *SuperCalc* help with this ranking? Yes! and in a "graphic" manner as you will soon see.

Start by entering the information shown in Figure 1 on a new *SuperCalc* form. One program convenience is the ease with which headings may be entered. Enter the SALES REPORT SUMMARY heading into cell A1. (Note how the text automatically spilled over into the empty cells at the right.) The /(F)ormat, (C)olumn,B<CR>,15<CR>

```
  |   A   ||     B     || C | |            E            |
1|        S A L E S   R E P O R T   S U M M A R Y
2|-----------------------------------------------------------
3|Salesman                 Flinkies sales(value and bar graph)
4|--------                 ----------------------------------
5|          3 Weeks Before 60   | C5/3
6|Adams     2 Weeks Before 63   | C6/3
7|          Week Before    55   | C7/3
8|          Last Week      83   | C8/3
```

Figure 1

ABACUS

It Figures!

Why have a portable calculator when you have a portable computer?

Written espically for your Osborne 1™, ABACUS allows you to turn your system into a 42 key calculator, giving you the ability to perform complex math with no programming knowledge.

ABACUS handles basic arithmetic, plus trigonometric functions, statistics and much more.

All for only $39.95

MAI Microcomputer Associates, Inc.
P.O. Box 3535
Arcadia, Ca 91006

☐ Enclosed is $39.95 (Calif. residents please include sales tax). Rush me ABACUS and its reference manual!

☐ Enclosed is $10.00 (Calif. residents please include sales tax). Rush me an ABACUS reference manual!

☐ Send me more information on ABACUS

Name: _____
Address: _____
City: _____ State: _____
Phone: ( ) _____ Zip: _____

Ref. OPC

SURVEYORS do it in the field

with a portable Osborne 1™ and DISCO-TECH software.

Civil and structural engineers and architects, too. DISCO-TECH's SURVEY 80 package contains eight professional programs for both field and office: CoGo, FiNDeR, EDM/Topo, VertiCurve, PLOTTER, Horizontal Curve Staking, STADIA, and MapCheck. Excellent screen format and easy-to-follow documentation.

Also civil and structural engineering programs and DISCO-SPECS specification-writing package.

Get SURVEY 80 for your 52-column Osborne 1 NOW! When the 80 column Osborne becomes available, we'll update your diskettes FREE.

Write or call DISCO-TECH today for free brochures and sample printouts.

disco tech T.M. microcomputer products a division of
Morton Technologies, Inc.
600 B Street / P.O. Box 1659
Santa Rosa, CA 95402
707/523-1600 or 527-8500

Dealer inquiries invited.

GRAPHICS

ON YOUR OSBORNE 1?™

GRAPHICS ON YOUR OSBORNE 1 IS AS EASY AS USING A PENCIL.

CREATE AN ENDLESS ARRAY OF DESIGNS, PICTURES, DRAWINGS AND GRAPHS FOR WORK OR JUST PLAIN FUN.

CREATE, SAVE, EDIT, REDISPLAY OR USE ANYTHING CREATED WITH GRAFIXWRITER IN YOUR OWN BASIC PROGRAMS.

GRAFIXWRITER WILL EVEN PRINT EXACT COPIES OF DISPLAYS THAT USE NON-GRAPHIC CHARACTERS ON ANY PRINTER.

GET YOUR FAMILY INVOLVED IN YOUR OSBORNE 1 WITH GRAFIXWRITER GRAPHICS!

$29.95 CHECK, MONEY ORDER, OR C.O.D. FROM:

ESC ESCAPE ENGINEERING

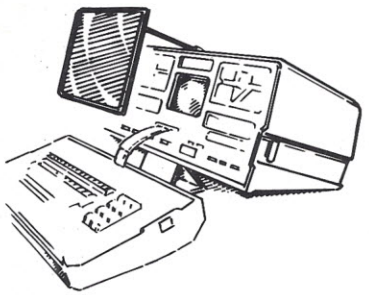
2536 S. DIAMOND SANTA ANA, CA 92704

CALIFORNIA RESIDENTS ADD 6% TAX

A HIGH QUALITY, EASY TO USE PROGRAM DEVELOPED SPECIFICALLY FOR THE OSBORNE 1.

GreenScreen

wide-view magnifier gives your Osborne a monitor-size screen, stores inside computer



- **TWICE THE SCREEN SIZE***
- **BETTER CONTRAST, LESS GLARE**
- **FOLDING STAND INCLUDED**
- **WIDE VIEWING ANGLE**
- **INSTANT INSTALLATION**
- **IMMEDIATE DELIVERY**

Send $18.95 + $1.50 shipping (California residents add $1.14 sales tax). Money order, cashiers check, Mastercard, Visa. Dealers inquiries invited.

Compared with other magnifiers.

EVERETT ASSOCIATES, INC.

429 Olive St., Santa Rosa, CA 95401. (707) 545-6644
Outside California call TOLL-FREE (800) 358-8292

Calc Aids

command should next be used to set columns B, C, D and E to new widths (15, 4, 1 and 30 respectively). You will note when column D is set to a width of one (1), the top column heading (D) is lost and the cursor disappears when in this column, but do not worry the (:) characters can still be entered normally.

SuperCalc has a useful graphics capability, which is requested through the asterisk (*) option of the /(F)ormat instruction. This special format option plots a number of asterisks (*) equal to the value of the number in the cell. The maximum value in column C is 83 and since this would make an excessively long graph, it was elected to shorten the bar length by dividing the number of Flinkies sold by three (3). Each asterisk will now represent three sales. After entering the C5/3 equation in E5 (you will see the result of the calculation not the equation on the screen) we can use the powerful replicate instruction, /(R)eplicate, E5<CR>,E6:E8<CR> to generate the other three equations. In entering the carriage return <CR> after the last address, *SuperCalc* will automatically update each address as it is created. Next, to generate the bar graph we simply enter /(F)ormat, (C)olumn, E<CR>,*,<CR> and the graph magically appears as shown in Figure 2.

We have created a graph of one salesperson's activity. Now, with a minimum of typing let's use the (C)opy command to enlarge the chart for six (6) salespeople. It will require three different copy instructions; two each that double the number of salespeople on the graph then a third adding the last two bar sets. These instructions should be entered in order: /(C)opy,A5:E9<CR>, A10<CR>, /(C)opy, A5:E14<CR>,A14<CR> and /(C)opy, A5:E14<CR>, A25<CR>. To calculate the average weekly sales enter AVERAGE (C5:C33) in cell C35 and the heading shown in Figure 3 into A35. The average will automatically be calculated with the AVERAGE routine skipping any empty cells (such as C24). Next, update the names and sales figures for each salesperson, and make sure all cells are recalculated by entering an explanation mark (!).

Now that you have created a standard *SuperCalc* bar chart as shown in Figure 3, let's try something not so standard. By using some of *SuperCalc's* other capabilities we will modify our chart to bring it directly to the point. First, delete column D with a /(D)elete,(C)olumn,D<CR> instruction then add a new row by entering /(I)nsert,(R)ow,5<CR>. You will note all necessary addresses will be updated. Amazing! Set columns D, E, F and G to be 15, 1, 15 and 15 characters wide with the (F)or-

```
  |   A   ||     B     || C ||            E            |
1|         S A L E S   R E P O R T   S U M M A R Y
2|-------------------------------------------------------------
3|Salesman                 Flinkies sales(value and bar graph)
4|--------                 -----------------------------------
5|          3 Weeks Before    60| ********************
6|Adams     2 Weeks Before    63| *********************
7|          Week Before       55| ******************
8|          Last Week         83| ***************************
```

Figure 2

```
  |   A   ||     B    || C ||            E            |
 1|         S A L E S   R E P O R T   S U M M A R Y
 2|-------------------------------------------------------------
 3|Salesman                 Flinkies sales(value and bar graph)
 4|--------                 ----------------------------------
 5|           3 Weeks Before    60| ********************
 6|Adams      2 Weeks Before    63| *********************
 7|           Week Before       55| ******************
 8|           Last Week         83| ***************************
 9|
10|           3 Weeks Before    36| ************
11|Banks      2 Weeks Before    44| **************
12|           Week Before       31| **********
13|           Last Week         30| **********
14|
15|           3 Weeks Before    42| **************
16|Campbell   2 Weeks Before    53| *****************
17|           Week Before       48| ****************
18|           Last Week         61| ********************
19|
20|           3 Weeks Before    43| **************
21|Davis      2 Weeks Before    36| ************
22|           Week Before       30| **********
23|           Last Week         35| ***********
24|
25|           3 Weeks Before    43| **************
26|Egbert     2 Weeks Before    75| *************************
27|           Week Before       80| **************************
28|           Last Week         82| ***************************
29|
30|           3 Weeks Before    52| *****************
31|Ford       2 Weeks Before    76| *************************
32|           Week Before       57| ******************
33|           Last Week         78| **************************
34|                                |
35|Average Weekly Sales =    53.88
```

Figure 3

mat instruction and blank column D from row 6 through row 36 with /(B)lank,D6:D36<CR>.

Next enter the characters and equations shown in Figure 4 into row 5 and Columns E, F and G. The equations can easily be input by starting with cell F6 then replicating copies down the column, but be careful. The two C36 addresses in the equation should *not* be incremented. This can be accomplished by entering /(R)eplicate,F6<CR>,F7:F34(,)(A),Y,N,Y,N; note the difference from the previous replicate instructions. Instead of entering a <CR> after the last address input a comma (,) and *SuperCalc* will ask if the ad-

SCI TEC
Scientific Technologies Co.

JOBS-IN-PROGRESS $125.00
Lists all equipment for a complete job, track when ordered, P.O. numbers, when required at shop, when receive, when required to job, and when invoiced. Track shop labor, Engineering, Travel, Perdiem, Frieght expense, Complete cost accounting verses Estimated cost. Includes simple sort routine.

JOBS-IN-PROGRESS SUMMARY $25.00
Print out compiled reports of all Jobs in Progress, profit tracking, Jobs in Progress, profit tracking, Work-in-process figures, backlog, Estimated profit.

BID CALCULATION $100.00
List all items on bid including equipment labor, engineering, travel, perdiem, and freight. Change labor rates, engineering rates, perdiem, travel, freight, and percentages of profit on summary worksheet. Print out three different options for customer-ready quotations. Includes simple sort routine.

SOUND SYSTEM ENGINEERING $75.00
Calculate sound system parameters based on room constants. Calculates room volume, surface area, reverb time, EAD, critical distance, and much more.

Sci Tec
1512 Elmendorf Dr.
Anchorage, AK 99504
(907) 333-6103
(Dealer Inquiries Invited)
$2.00 for postage

QUICK — EASY CREATE SCREENS with

VID-ED

Call saved screens in your BASIC or ASSM programs.

Simple Instructions, Utilities and Examples

VID-ED with Manual $75
Manual Only $10
Calif. Res. add 6% Sales Tax

Bico
933 Eastmont Place
Escondido, CA 92026

```
  |   A   ||     B    || C ||     D     | |            F            ||            G            |
1|        S A L E S   R E P O R T   S U M M A R Y
2|-----------------------------------------------------------------------------------------------
3|Salesman                 Flinkies sales(value and bar graph)
4|--------                 ----------------------------------
5|                                Below Average | Above Average
6|          3 Weeks Before 60                   | IF(C6>C36,(C6-C36)/2,0)      IF(C6<C36,(C36-C6)/2,0)
7|Adams     2 Weeks Before 63                   | IF(C7>C36,(C7-C36)/2,0)      IF(C7<C36,(C36-C7)/2,0)
8|          Week Before    55                   | IF(C8>C36,(C8-C36)/2,0)      IF(C8<C36,(C36-C8)/2,0)
9|          Last Week      83                   | IF(C9>C36,(C9-C36)/2,0)      IF(C9<C36,(C36-C9)/2,0)
```

Figure 4

dress needs adjusting. You have a choice of answering no (N), ask (A) or value (V). You should choose the (A) option after which *SuperCalc* will ask if the equation addresses should be updated. If you answer Y, N, Y and N, as shown, then the equation will be correctly replicated. Repeat the same procedure for the column D equations but entering Y, N, N and Y in answer to the (A)sk questions. Next, blank rows 10, 15, 20, 25 and 30, and format columns F and G to the asterisk (*) format.

The equations in column F calcu-

SOFTWARE & ACCESSORIES for the OSBORNE

WE RAN OUT!

Sorry, but if finally happened. Yep, we finally ran out of our SUDDEN! FREE GREEN SCREENS, and we won't be getting any more. We still have a lot of great deals, though, and we hope you'll take advantage of 'em! Actually, this is just a sample of what we have available for you. If you're interested, check out our free catalogue for a complete description of our latest software & accessories for the OSBORNE.

PUBLIC DOMAIN PACKAGE $90

This package contains TEN DISKETTE SIDES absolutely packed with great programs! Many are from the CP/M users group material, with some altered programs formatted especially for the OSBORNE, and some new material, all of it in the public domain, available at $20 each, or $90 for the entire package, including:

- Modem 7
- Calendar File
- Z-80 Assembler
- Z-80 Disassembler
- Original Adventure
- Utility Programs
- Master Catalogue
- Math Package
- Disk Nurse
- Castle & CIA Adventures

BONUS: OSBORNE ACCOUNTING GENERAL LEDGER (four diskette sides configured for the OSBORNE) ★ ★ FREE ★ ★ Until July 4th, 1983.

ACCESSORIES

$5.00 OFF WAS

Six-foot Keyboard Cable $25
Ten-foot Serial Printer Cable $30
Ten-foot Serial Modem Cable $30

$10.00 OFF

CVA-1 Monitor Adaptor $37

$15.00 OFF

Six-foot Parallel Printer Cable $45
(guaranteed to run ANY parallel printer)

NO DISCOUNT

WORDSTAR® Keyboard Overlay $17
SUPERCALC® Keyboard Overlay $17
MBASIC® Keyboard Overlay $17
(Please specify whether for BLUE (new) or TAN (old) OSBORNE)

SPECIAL GAMES PACK $50

Arcade Patman $30
Games #1 ..... $20
- Train
- War
- Bomber
- Bzzt
- Calc

Games #2 ..... $20
- Snake Race
- Bug Crawl
- Squiggle
- Tail Chase

OTHER OFFERINGS

Baudrate Setter $20
(Sets 300-1200-9600 Baud)
Home Finance $20
(Development System)
Active Trace $115
(MBasic Programmer's Tools)
dUTIL $70
(dBASE II Programmer's Tools)
Pascal Sort Package $180
(The fastest sort routines!)
Hex-Print-R $38

WORDSTAR INSTALLED $20

You love WORDSTAR, but you can't get your printer to do all you need? This is for you! Send us $20.00 and a copy of your WORDSTAR and we'll patch your WORDSTAR to drive your Printer. Get functions like large, medium, small type faces, subscript/superscript,* attractive underlining, 6/8 lines per inch. Available for NEC, C-ITOH, OKIDATA, and EPSON printers.

(*available only on NEC and C-ITOH)

SUDDEN! PRODUCTS GROUP
1512-C PUALELE PLACE, HONOLULU, HI 96816
(808) 735-1955

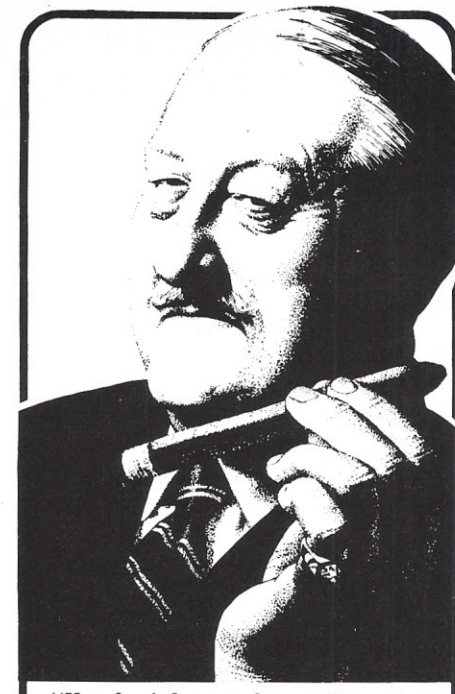
HAWAII Residents add 4% Sales Tax
Shipping and handling $3
If COD add $3
Send cheque or money order
(Sorry, no credit cards)

late zeros if the number of sales is less than average; otherwise, the positive difference between the weekly sales and the average will result. In column G the equations do the opposite; only less than average sales produce positive non-zero values. You will note a scale factor of two was used instead of the earlier three values.

Three final steps remain and you will have created the comparative chart shown in Figure 5. First, the number of asterisks shown in the cells of column G should next be entered as text strings "**...*<CR> into the same row of column D. Second, a

```
                S A L E S   R E P O R T   S U M M A R Y
-------------------------------------------------------------------
Salesman                  Flinkies sales(value and bar graph)
--------                  ----------------------------------
                                  Below Average | Above Average
            3 Weeks Before    60                | ***
Adams       2 Weeks Before    63                | ****
            Week Before       55                |
            Last Week         83                | **************

            3 Weeks Before    36        ********|
Banks       2 Weeks Before    44            ****|
            Week Before       31     ***********|
            Last Week         30     ***********|

            3 Weeks Before    42           *****|
Campbell    2 Weeks Before    53                |
            Week Before       48              **|
            Last Week         61                | ***

            3 Weeks Before    43           *****|
Davis       2 Weeks Before    36        ********|
            Week Before       30     ***********|
            Last Week         35       *********|

            3 Weeks Before    43           *****|
Egbert      2 Weeks Before    75                | **********
            Week Before       80                | *************
            Last Week         82                | **************

            3 Weeks Before    52                |
Ford        2 Weeks Before    76                | ***********
            Week Before       57                | *
            Last Week         78                | ************
                                  Below Average | Above Average
Average Weekly Sales =     53.88
```

Figure 5



"You don't have to be a millionaire to get the best software deal around."

Free* Software

OSBORNE USERS

Over ***200*** *public domain software programs including many popular games, valuable utilities, and useful specialty programs (modem, ham, etc.), are available to you* ***FREE*** *through the Public Domain Users Group.*

—SAMPLE DISKS—

I. GAMES - *MBASIC*
Eliza, Startrek, Othello, Baseball, Dots

II. GAMES - *CP/M*
Adventure, Biorythms

III. UTILITIES - *CP/M*
Contains over $100 worth of valuable CP/M utilities! *(14 programs)*

*A $10/disk service charge is made to cover the cost of the disk plus handling and shipping charges—*the software is free!*

Special Offer!
All 3 for only $25

To order, send check or money order to:

A-1 COMPUTERS, Inc.
P.O. Box 1442
Orange Park, FL 32067

A complete listing of available programs will be sent with each order.

OSBORNE 1 IS A TRADE MARK OF OSBORNE COMPUTER CORPORATION

many items in stock

ORDER NOW
505/294-8856

the OZMOD — $39.95

Inexpensive, reliable video adapter for use with the Osborne 1™. Use any standard monitor as an external display.

the OZMOD RF — $74.95

Allows any home TV set to be used as a display for the Osborne 1. Set the transmitter near the TV set, no installations or connections.

the CTADAPTER — $59.95

Popular parallel printer adapter, allows use of any parallels configured Epson or IDS printer from the IEEE port of the Osborne 1. Specify Epson or IDS when ordering.

****NEW**NEW**NEW**NEW**NEW**NEW**NEW**NEW**NEW**

THE GAMESTYX — $49.95

The original joysticks for the Osborne 1. Furnished complete with demo action game programs. Play the games provided or program your own.

ROCKY MOUNTAIN DATA

THE EXCLUSIVE DISTRIBUTORS FOR ALL CTA PRODUCTS

Dealer inquiries welcome

9004 MENAUL, NE □ ALBUQUERQUE, NEW MEXICO 87112 □ 505/294-8856

FREE with software purchase ONE CP/M HANDBOOK

DISCOUNT SOFTWARE

OSBORNE 1™ COMPATIBLE SOFTWARE

* = **indicates Custom Download. Allow 2-3 weeks delivery. (More software available when double density disk drives are released)**

LANGUAGES

PRODUCT	MANUFACTURER	DISK & MANUAL/ MANUAL ONLY
*CB-80	Digital Research	$500/30.00
Forth (Z-80 Version)	SuperSoft	$149/30
Fortran W/Ratfor	SuperSoft	$300/35
*'C' Compiler	SuperSoft	$200/20.00
*LISP	SuperSoft	Call
*ADA	SuperSoft	$250/NA
*CICSOBOL	Micro focus	$850/NA

UTILITY PACKAGES

*Z-SID	Digital Research	$ 90/15
*DeSpool	Digital Research	$ 30/10
Edit-80	Microsoft	$120/NA
*Crosstalk	MicroStuf	$150/NA
Lynx	Redding Group	$250/NA
TRANS 80,86,65,69	Sorcim	$125/NA
Diagnostics II	SuperSoft	$100/20.
Utilities I or II	SuperSoft	$ 60/NA

STATSGRAPH

Use your OSBORNE 1 to perform statistical analysis and graphing! Includes pie graph, bar graph, and scatter graph. No special graphics hardware needed — $198.00

APPLICATION PROGRAMS

FABS	Computer Control	$195/20
Ultra Sort II	Computer Control	$195/25
Micro B+	Faircom	$259/20
Mathe Magic	Int'l Software Marketing	$ 95/NA
Super M-List	SuperSoft	$ 75/NA
Stats Graph	SuperSoft	$198/NA

ORDERS ONLY—CALL TOLL FREE VISA • MASTERCHARGE

1-800-854-2003 ext. **823** • **Calif. 1-800-522-1500** ext. **823**

Outside Continental U.S.—add $10 plus Air Parcel Post • Add $3.50 postage and handling per each item • California residents add 6% sales tax • Allow 2 weeks on checks, C.O.D. $3.00 extra • Prices subject to change without notice. All items subject to availability • ®—Mfgs. Trademark. Blue Label $3.00 additional per item.

THE DISCOUNT SOFTWARE GROUP
6520 Selma Ave. Suite 309 • Los Angeles, Ca. 90028 • (213) 837-5141
Int'l TELEX 499-0446 DISCSOFT LSA • USA TELEX 194-634 (Attn: 499-0446)
TWX 910-321-3597 (Attn: 499-0446)

CalcAids

/(F)ormat,(E)ntry, D6:D35<CR>, TR<CR> instruction should be entered. The text right (TR) is used to slide the asterisk strings you entered to the right making them reflect the less than average sales performance results. A neat feature which could be added to *SuperCalc* would be to allow the TR format instructions to work on an asterisk formatted field. Finally, the /(G)lobal,(B)order command can be used to remove the address characters around the edge,making your sales performance chart more attractive. Print your chart only from A1 to F36. Since the bars in column G were created as a convenience in calculating the number of asterisks to be enterd manually into column D, this last column should not be printed in the final graph.

One final note, to calculate the sales bar charts correctly the average in C36 must be evaluated before the equations in Columns F and G. To force a column by column calculation sequence the /(G)lobal,(R)ow command must be executed once during the worksheets creation.

(J. R. Garfield is presently an engineer with the aerospace industry. He is also involved in a consulting capacity with a wide variety of business, computer, and engineering projects.)

The Portable Companion is always looking for articles, tips and other editorial material for use in the publication. Editorial material in this magazine is compensated for at a minimum of $25 per printed page.

Opinions in editorial material in this magazine are those of the authors only and do not reflect the official stance of Osborne Computer Corporation. We encourage open discussion of Osborne policies, procedures and products.

Get the Most from your Printer & WordStar® with

Custom Installations

For C Itoh Prowriters, NEC PC8023, all Epsons (specify if w/Graftrax), Okidata 82A & 83A, Comrex CR-1, and Brother HR-1. (Others available soon)

This service saves you hours of installation hair pulling by programming WordStar to give you easy access to virtually all of your printer's capabilities. (Send for details. SASE ensures quickest response)

You receive:

★ An explanation of the installation, hints, suggestions, and a summary of printer control codes
★ Superscripting and Subscripting capabilities (except Okidata)
★ A demo/test printout file

$25.00 Installed and delivered* (specify printer & options)

HexPrintR™

This program breaks through the Wordstar®/printer barrier by giving the printer code ^R the ability to send ANY character or code AT ALL to your printer, even 8 bit codes.

Need special characters like:

↑ ¿ ® © ¶ ™ ?

HexPrintR gives them to you if your printer has bit image graphics capabilities. Manual included.

$39.00 Delivered

$45.00 Installed and delivered*

Manual only: $3. (applicable to order)

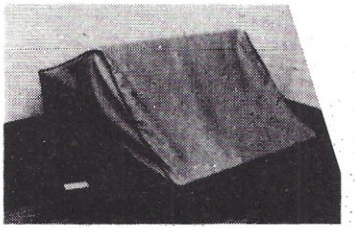
Together a **Custom Installation** and **HexPrintR™** give you one of the most refined and powerful sets of printer control codes available today.

$55.00 Installed and delivered*

C.I. SOFTWARE & COMPUTER PRODUCTS
1380 Garnet Ave. - E149 - San Diego CA 92109 . 619/483-6384

*Include a copy of your WordStar® diskette with a peice of corrogated cardboard. HR-1, CR-1, and Okidata s do not need HexPrintR to gain full capabilities. WordStar® is a registered trademark of the Micro Pro Corporation. California residents add 6% sales tax.

When You Buy Quality . . . .



Protect With Quality.

AVAILABLE FOR

North Star	TRS 80 II, III	Okidata ML Series
Super Brain	M. T. I.	TRS 80 V–VIII
Vector Graphic	CBM 8032, 4032	Franklin Ace 1000
Kay Pro II	Epson MX Series	NEC APC
Osborne	Atari 800, 400	Apple III
IBM PC		

Leave your computer set up and ready for instant access; provide protection for your investment with a custom designed, professional touch for your home or office.

The best in its class, our new concept PROTECTIVE COVERS were designed to be functional with the user and observer in mind.

COMPARE THESE FEATURES:

- **protects against dust, dirt and surface scratches.**
- **unlike vinyl, plastic or nylon covers, static electricity is not a problem.**
- **lint free, top quality broadcloth (65% polyester, 35% cotton) allows ventilation; minimizes risk of condensation.**
- **durable; washable — needs no ironing; maintains proper size and shape.**
- **designed, manufactured and packed in U.S.A.; comes with a warranty against defects in material and workmanship.**
- **available in Cranberry, Navy or Pewter (each piped in contrasting color) to compliment any decor.**

AN IDEAL GIFT: HELP KEEP YOUR INVESTMENT LOOKING AND PERFORMING LIKE NEW!

— Custom Designers and Manufacturers of Computer Dust Covers —

Covers for other popular hardware available, visit your local computer store or contact us. *1982 B.L.&W.

SHIP TO: *(PRINT)* _____

_____

City _____ State _____ Zip _____ Phone _____

Make _____ Model _____

Select Color: Navy ☐ Pewter ☐ Cranberry ☐

MONOGRAMMING: (Add $6.00 per cover, and allow 5 extra days for delivery. We cannot accept returns on monogrammed items.

Send Check or Money Order to: PRINT INITIALS: ☐ ☐ ☐

B.L. & W. - PO Box 381076, Memphis, TN 38138 (901) 754-4465

Computers $18.00 $
Printers $16.00 $
Disk Drive $14.00 $
Shipping $ 1.00
Monogramming $_____
(TN Residents add 6% sales tax) $_____
(Foreign–Pay in U.S. Funds) TOTAL $_____

dBASICS

Graceful editing with dBASE II

David Gute

A graceful editing routine allows an operator to access a specific record in a given data base, make the necessary changes with a minimum knowledge of dBASE II, and be able to exit from the editing routine when desired.

With minor alterations you can convert the routine from my column in the last issue of *The Portable Companion* into a separate data entry routine called ENTRY.CMD as shown in *Figure 1*.

Let's assume we have a data base (named TRAVEL) we want to edit with a numeric field called EMP:NO. This field stands for the employee number and we can identify any employee by his or her employee number rather than their record number.

In order to access a specific record quickly, the person writing the routine will become acquainted with the FIND command. When a file is indexed on a field, it will put the file in ascending order starting with the lowest value in the specified field and ranging to the highest value. When a file is indexed a new file is created by dBASE II with an .NDX extension. Index the data base file by using the

Continued on page 94

The *Ultimate* For dBASE II Users

dNAMES®

DOCTORS REALTORS CONTRACTORS DENTISTS
LAWYERS MAIL ORDER SERVICE COMPANIES CONSULTANTS

If you deal with people, these are features that make dNAMES™ invaluable.

- A user friendly extensive reference and master mailing program designed to organize all your lists of customers, suppliers, sales leads, acquaintances, etc ...
- Totally menu driven with error checking requiring a minimum of training and effort thus insuring accurate and efficient data entry taking advantage of the power of dBASE II (2.3B).
- Pick from up to 40 user supplied classification names, enabling you to designate each record in up to six different categories.
- Option of five report formats: single column or three across AVERY 33 labels, single line, 2-6 lines, or Mailmerge data file. These are based on your choice of specifications: name, classifications, date entered and date updated, a special six-digit code field, and zip code, sorted on your choice of fields in seconds.
- Automatically checks file first to see if that record is already on file; if so, it displays all current information (including date entered and last update) from up to three different files. You can then skip, edit, add a record, delete or recall, mark for future transfer, or even address an envelope.
- Immediate display of all information in a record by entering either all or part of record name or phone number.
- Keeps track of name, salutation, address, city, state, zip code, phone number, classifications, entry date, last update, six character code and up to four lines of comments, all dispersed into three files for speed and efficiency. A special capability affords you the option of using part of the first line of the comments for an additional line to be used when printing labels e.g., four line addresses or an attention line.
- Transfer old or unused records to an alternate backup disk. It also supports multiple data drives.
- Incorporates the most sophisticated edit program available for dBASE II. No more searching for individual records to edit. Display for instant reviewing or editing only records that fall within your choice of ranges.
- Although the uses for this program are endless, source code and documentation are included providing a base for limitless additional customizing.

only $129.00

(Available on most popular computers and IBM/PC.)

Ashton-Tate Fox & Geller	dBASE II	$469.00
	dGRAPH-new!	219.00
	QUICKCODE	219.00
	dUTIL	65.00
Anderson-Bell dBASE II applications	Abstat	369.00
	DBHELP (on line help)	20.00
	Payroll	350.00
	Job Costing	350.00

Inquire about other dBASE business applications.
Simple Software PACMAX, CUTOFF, NYSE and SNAKES.
4 addicting CPM GAMES for the price of 1. **Only $39.00**

We also handle an extensive line of hardware, software, and peripherals. Call us last before ordering and see if we can't beat your best price. For example:

Hayes SMARTMODEM	$ 209.00	ALTOS 5-15	2,295.00
QUADBOARD	399.95	Televideo TS-802	2,695.00
EPSON MX80 F/T	475.00	C.ITOH Prowriter	449.95

CALL OR SEND FOR YOUR FREE COPY OF dTIPS

DATA BASED SOLUTIONS
P.O. Box 9797, San Diego, CA 92109

TECHNICAL HOTLINE
619-272-5556
CONSULTATIONS AVAILABLE

ORDER DESK ONLY
619-272-5874

"Osborne 1* Users"
Take Advantage of our Special on the hard disk Osborne 1 users recommend. Design One

5 meg	10 meg	15 meg	20 meg
$2295	$2495	$2895	$3295

Offer Expires 3/15/83

1 yr. Warrantee on drive & Power supply—90 days on Controller

*Osborne is a trademark of Osborne Computer Corporation

PAYMENT — Cashiers Ck/M.O./Bank transfers
California res. add 6% tax
Allow 2-3 weeks for personal checks

```
*DATA ENTRY PROGRAM
SET ESCAPE ON
*
STORE 'N' TO ozzie
  DO WHILE ! (ozzie)='N'
     ERASE
     ?
     ?'              1 - ENTER INFORMATION'
     ?'              Q - QUIT GRACEFULLY'
     ?
     WAIT TO ozzie
     ERASE
       IF ! (ozzie) = 'Q'
            RETURN
     ELSE
       IF ! (ozzie) = '1'
            APPEND
       ELSE
            LOOP
       ENDIF
     ENDIF
ENDDO
RETURN
```

Figure 1

```
*MAIN.CMD
*MAIN MENU DRIVER
SET TALK OFF
SET ESCAPE ON
*
USE B:TRAVEL INDEX B:TEMP
*
STORE 'N' TO proceed
  DO WHILE !(proceed)='N'
     ERASE
     ?
     ?
     ?
     ?'                    MAIN MENU'
     ?'                    ========='
     ?
     ?
     ?'         1 - ENTER INFORMATION'
     ?'         2 - EDIT INFORMATION'
     ?'         Q - QUIT'
     ?
     ?
     ?
     ?' Please enter your selection'
     ?
     WAIT TO action
       DO CASE
          CASE !(action)='1'
            DO ENTRY
          CASE !(action)='2'
            DO DBEDIT
          CASE !(action)='Q'
            QUIT
          OTHERWISE
            ?'***INVALID DATA ENTRY, TRY AGAIN***'
          ENDCASE
       ENDDO
  ENDDO
```

Figure 2

OSBORNE 1™

SOFTWARE

ACCOUNTING
DATA BASE MANAGEMENT
ENTERTAINMENT
LANGUAGES
MAILING LIST
MANUFACTURING/ RETAIL SYSTEMS
MEDICAL/DENTAL SYSTEMS
MODELING, PLANNING & ANALYSIS
TELECOMMUNICATIONS
TIME, BILLING & SCHEDULING
WORD PROCESSING

Largest Selection
Of Osborne 1 Software
Over **50** Programs Total

Single & Double Density

Write Or Call For Our List

CORNERSTONE SOFTWARE

PO BOX 5151
SAN JOSE, CA 95150
(408) 972-0515

DEALER INQUIRES INVITED

OSBORNE 1 IS A TRADE MARK OF OSBORNE COMPUTER CORPORATION
COPYRIGHT © 1981 CORNERSTONE SOFTWARE

following commands:

USE B:TRAVEL
INDEX ON EMP:NO TO B:TEMP

These commands are only used once. After the indexed file (TEMP) has been created, the main menu will automatically update any records that are added or edited.

Set up a main menu driver *(Figure 2)* where selection 1 says ENTER INFORMATION, selection 2 says EDIT INFORMATION, and selection Q says QUIT GRACEFULLY. This routine is simple—it should not require a great deal of explanation. Create it by using the non-document mode in WordStar and call it MAIN.CMD. (Command files should be stored on the dBASE II diskette in Drive A while database files are called up from the B drive.)

Now that you have a main menu it's time to start on the edit routine.

DBEDIT.CMD Instructions

1—This stores characters in memory variables called ADD, PROCEED and START. Decisions will be based on what is stored at these variables later in the program.

2—'Y' is stored in memory variable START. A loop has begun and all instructions between the DO WHILE and the ENDDO will be executed over and over until the program changes the value of START.

3—This instruction will wait until the operator enters an employee ID number and a carriage return.

4—If a blank is inserted by the operator, this routine will loop back to the beginning of the EDIT routine, forcing the operator to enter something other than blanks.

5—The &ID is a MACRO instruction. It takes the value of the memory variable and converts it to a character string. Along with the find command, it will search for an ID number that matches.

6—This routine checks to see if there is a record with such an ID number.

7—Stores the record number located by the find command to a memory variable called NUMBER.

8—Using the macro instruction, this will edit the record number that was stored in NUMBER.

9—Releases all values stored in any memory variables. Prevents confusion if another routine was called using the same memory variables.

10—RETURN back to the MAIN MENU.

Using MAIN.CMD

Very simply issue one of the following commands:

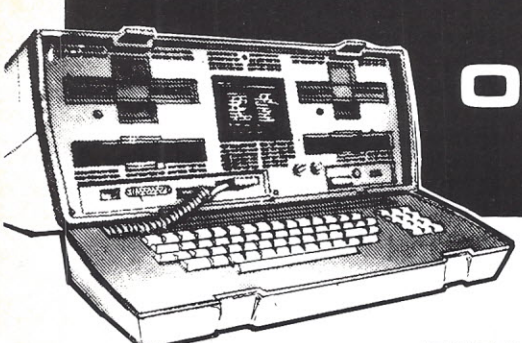
A>DBASE MAIN <cr>
or
.DO MAIN <cr>

MAIN.CMD, ENTRY.CMD, and DBEBIT. files should be located on Drive A. TRAVEL.DBF and TEMP.NDX are located on Drive B.

You have now programmed two subroutines and one main menu driver...and it really has been quite simple. Hopefully, you also picked up a few more commands and had the opportunity to become familiar with their operation.

• EASY READING
• FAST LEARNING
• COVERS DOS, BASIC, & MORE
• REALIZE THE POTENTIAL

UNDERSTANDING THE OSBORNE 1™ VOLUME 1



THE QUESTION IS:
WHICH IS TO BE
THE MASTER, THAT'S ALL..

14.95 + 1.50 POSTAGE & HANDLING
DEALER'S INQUIRIES INVITED

CALABRESE PUBLICATIONS P.O. BOX 7138 HICKSVILLE, N.Y. 11801

*Osborne 1 is a trademark of Osborne Computer Corporation

```
*DBEDIT.CMD
*EDIT ROUTINE FOR EXPENSE REPORT
*
STORE 'E' TO ADD
STORE 'N' TO PROCEED                                    <-- 1
STORE 'Y' TO START
  DO WHILE !(START)='Y'                                 <-- 2
     ERASE
     ?
     ?
     ?'  EDIT ROUTINE FOR EXPENSE REPORT'
     ?'  ================================'
     ?
     ?'CNTRL-C WRITES RECORD TO DISK, MOVES TO NEXT RECORD'
     ?'CNTRL-R WRITES RECORD, BACKS TO PREVIOUS RECORD'
     ?'CNTRL-U TOGGLES DELETION MARK ON AND OFF'
     ?'CNTRL-W SAVES ALL CHANGES AND RETURNS TO THE MENU'
     ?'CNTRL-Q ABORTS ALL CHANGES MADE, RETURNS TO MENU'
     ?
     ?'************************************************'
     ?
     ?
     ACCEPT 'ENTER EMPLOYEE NUMBER TO LOOK UP' TO ID    <-- 3
     ERASE
     IF ID=' '
        LOOP                                            <-- 4
     ENDIF
     FIND &ID                                           <-- 5
     IF #=0
        ERASE
        ?
 ?
 ?
 ?'NO SUCH RECORD EXISTS THE WAY YOU SPECIFIED IT.'
 ?
 ?
 ?'TRY AGAIN, ADD TO FILE, OR QUIT (T/A/Q)?'
 ?
 WAIT TO ADD                                            <-- 6
   IF !(ADD)='A'
                ERASE
                DO ENTRY
                STORE 'E' TO ADD
           ELSE
           IF !(ADD)='Q'
             ERASE
                  RETURN
                ELSE
                     ERASE
                     LOOP
           ENDIF
   ENDIF
ELSE
     STORE STR(#,5) TO NUMBER                           <-- 7
     EDIT &NUMBER                                       <-- 8
     RETURN
ENDIF
ENDDO
RELEASE ALL                                             <-- 9
RETURN                                                  <-- 10
```

Figure 3

MODULAR TAX

TAX PLANNING AND TAX PREPARATION QUALITY SUPERCALC™ TEMPLATES

- Investment Planning
- Unique Tax Forms
- Tax Deductible
- CDP Developed and Field Tested

Organize returns, income, expenditures, and tax journals.

Order the tax deductible MODULAR TAX software package, and establish financial freedom and ultimate financial success for yourself and others!

ORDERING INFORMATION

FEDERAL INDIVIDUAL TAX MODULES:
$10 per form
($20 for 1040).

INDIVIDUAL TAX PACKAGE:
$50, 1040 (sched. A,B,C,D,E), 2441, 3903, 4562, and 5695.

INDIVIDUAL TAX PRO:
$120, all 30 valuable forms.

FEDERAL PARTNERSHIP TAX PACKAGE:
$50. form 1065 and schedules.

FEDERAL CORPORATION TAX RETURNS:
$50, form 1120 and schedules.

STATE TAX RETURNS:
Ask about availabilities.

Please enclose payment with order and send to:

MODULAR TAX
P.O. Box 3361
Stamford, CT 06905

Order & Information:
(203) 322-1171

Puzzler

Name that instruction set!

INSTRUCTION	*MEANING*
BAH	Branch and hang
IIB	Ignore interrupt and branch
TDB	Transfer and drop bits
DO	Divide and overflow
DC	Divide and conquer
SRZ	Subtract and reset to zero
PIC	Punch invalid character
SSJ	Select stacker and jam
RAST	Read and shred tape
CMI	Clobber monitor immediately
SRSD	Seek record and scar disk
BST	Backspace and stretch tape
RIRG	Read inter-record gap
UDR	Update and delete record
RS	Random slew
SSB	Scramble status byte
EDR	Execute destructive read
EIOC	Execute invalid op code
EP	Execute programmer
ERM	Erase reserved memory
PBD	Print and break drum
MLR	Move and lose record
CRN	Convert to Roman Numerals
IDPS	Ignore disk protect switch
HCF	Halt and catch fire
FOPC	[Set] false out-of-paper condition
WUPO	Wad up printer output
IEOF	Ignore end of file
DWIT	Do what I'm thinking
PPL	Perform perpetual loop
ZD	Zap directory
DSH	Destroy sector header
DAP	Deselect active peripheral
SMD	Spontaneous memory dump (use only when payroll checks are loaded.)
SFTT	Strip form tractor teeth
HRPR	Hang up and ruin printer ribbon
ACQT	Advance clock to quitting time

—Anonymous

(We found this "spoof" on instruction sets floating around and thought we'd share it with our readers. No. It's not the set to the "Osborne 2.")

And the winner is . . .

After sifting through the many inventive and ambitious answers to the PUZZLERS in the first three issues of *The Portable Companion,* we have finally zeroed in on the big winners (bet you thought we'd never get to it)! So without furthur ado . . .

WINNERS-Puzzler #2
August/September Issue
"Most Elegant Answer"

Verne Y. Kurisu
San Juan Capistrano, CA

Due to the erractic nature of our mail system in getting the magazine to our readers, we decided not to award a subscription to the first correct answer. Instead, all correct answers were thrown in the hat and the winner was:

Andrew Gottlieb
North Seattle Users Group

PRIZE: One year free subscription to *The Portable Companion* for both winners.

Answer:
We chose to print Verne Kurisu's answer as being most elegant because it was simple, clean, and did not need integer formulas. Positive, negative, or fractional numbers could be used.

```
 :          A          ::   B   :
 1:Answer to August/September Puzzler
 2:
 3:      INPUT ANY NUMBER  :
 4:         multiply by 5  : B3*5
 5:                add 5  : B4+5
 6:         multiply by 2  : B5*2
 7:        add 2 = RESULT  : B6+2
 8:     ------------------  : -------
 9:
10:        original number = (B7-12)/10
11:
```

```
 :          A          ::   B   :
 1:Answer to August/September Puzzler
 2:
 3:      INPUT ANY NUMBER  :       10
 4:         multiply by 5  :       50
 5:                add 5  :       55
 6:         multiply by 2  :      110
 7:        add 2 = RESULT  :      112
 8:     ------------------  : -------
 9:
10:        original number =       10
11:
```

WINNER—Puzzler #3
October/November Issue

Claude Ostyn
Sitka, Alaska

```
 :          A          :  :   C   ::   D   ::   E   ::   F   :
 1:       cruising speed  (given)        1000  arbitrary value only
 2:        maximum speed  D1/(4/5)       1250
 3:           wind speed  (D2*2)-D2      1250  West  East
 4:           trip speed  D2+D3          2500  West  East
 5:
 6:     IF RETURN WAS AT
 7:    CRUISING AIRSPEED
 8:
 9:              airspeed  D1             1000  East  West
10:        less windspeed  D3             1250  West  East
11:          ground speed  D9-D10          -250  into the Atlantic,
12:                                              flying backwards
13:     IF RETURN WAS AT
14:     MAXIMUM AIRSPEED
15:
16:              airspeed  D2             1250  East  West
17:        less windspeed  D3             1250  West  East
18:          ground speed  D16-D17            0
19:
20:CONCLUSION: YOU NEVER ARRIVED IN SAN FRANCISCO
               YOU NEVER EVEN LEFT NEW YORK!
```

WINNER - Puzzler #1
June/July Issue

David Beckwitt
Anchorage, Alaska

Beckwitt's answer (along with the six other correct answers we received) went into a hat for a drawing for the promised software package: *MuMath.* Adam Osborne himself plucked the winner from the hat and Mr. Beckwitt should receive his software shortly.

Answer:

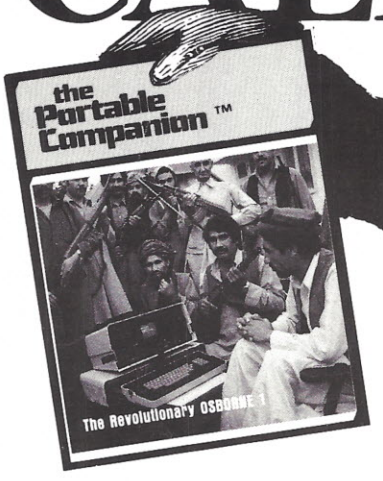
Age of Monkey	1.875 years
Age of Mother	28.125 years
Rope Length	1.875′
Rope Weight	.625 lbs.
Weight of Monkey	1.757813 lbs.
Weight of Weight	1.757813 lbs.
Weight of Banana	2.98875 ozs.
Length of Banana	1.484375″

See page 76, Aug/Sept issue for the sequence of calculations.)

NOTE: We must cop to an error that was printed in the August/September issue under "Get the Monkey Off Your Back and Start Calculating." We stated that Michael Brassil's answer was erroneous (blush). In fact, he was dead right and his name was dropped into the hat. In addition, readers who came up with Brassil's answer and then made changes to the syntax of the question due to our misleading information were also included. Due to any embarrassment we may have caused Mr. Brassil, we would like to send him a free subscription to the magazine to sooth his spirits. *(Unfortunately Mike, we don't have your address so please contact us.)*

(The "Monkey Puzzle" is in the public domain. It was previously published in James Fixx's Games for the Super-Intelligent, and has circulated amongst Mensa Society puzzle fans.)

We now make HOUSE CALLS



A subscription to *The Portable Companion* helps you:

- Keep up with the latest product information
- Get the most out of your computer with short cuts and helpful hints
- Crammed full of product evaluations, application ideas and solutions to common problems
- Provides a forum for user ideas and feedback
- Keep up to date with what Osborne User groups are doing across the nation
- Dr. Adam Osborne's "From the Fountainhead" is resurrected

Don't wait to take full advantage of the benefits your Osborne 1™ provides. For only $25.00 you receive twelve exciting issues of *The Portable Companion* delivered to your doorstep. Complete subscription card TODAY.

the Portable Companion™

Advertisers' Index

A-1 Computers 89
Adam, Inc. 82
Apogee Designs Ltd. 76
Applied Technology 72
Austin Computer 78
B.L. & W. 91
Bottom Line 32
Business Master 36
Business Micro 76
Calabrese Publications 94
CBico 87
C.I. Software 91
Computer Cannery 66
Comsol 80
Continental Software 53
Cornerstone Software 93
Contact Enterprises 58
Creative Computing Products 42
Data Access 7
Data Base Solutions 92
Data Flow 15
Data Sources 18
Desert Computer 57
Digital Marketing 5
Dipco 14
DiscoTech 85
Discount Software 90
DTC 39
Dynacomp 1
Easy View 67
Engineered Software 74
Escape Engineering 86
Everett Associates 86
F.O.G. 71
Fox & Geller 24
F.Y.I. ..... I.B.C.
Gamma Research 6
John Gaudio & Associates 56
Hawkeye Grafix 22
Howard Cooper & Associates 59
Integrated Systems 74
Ironwood 72
JMM Enterprises ..... B.C.
JRT Systems 17
Keller Consulting 78
Leading Edge ..... I.F.C.
Learning Shack 51
Marathon Computers 80
Mega Byte 23
Micro Art Programmers 82
MicroComputers of New Orleans 84
Microcomputer Associates 85
Microhouse 45
Micro Methods 65
Mindware 11
Modular Tax 95
Olive Branch 99
Orthocode 13
Osborne Computer Corporation 25, 33, 68, 69
Osborne McGraw-Hill, Inc. 16
Osmosis 49
Portable Software 19, 21
Portable Companion 98
Pro Micro 81
Real Data, Inc. 80
Relational Systems 63
Research Associates, The 84
Robonics 12
Rocky Mtn. Data 90
Rocky Mtn. Software ..... 60 & 61
Ruff Software 10
Scientific Technologies 87
Selectone 8
SGW 83
Software Store, The 20
Software Supermart 62
Software Toolworks 79
Sorcim 3
Strobe 48
Sudden Software 88
Swan Software 64
Tanstaafl 70
TNW 75
Transtar 2
Trantor 26
Westwind 77
Wholesale Suppliers 13

Disclaimer: Osborne Computer Corporation does not endorse products that are advertised in this publication, nor are the claims in the advertisements checked for misrepresentations or misleading information. All specifications listed for advertised products are those of the advertiser, not of Osborne Computer Corporation. As always, be careful when deciding which items you want to purchase.

If you encounter problems with a product, first attempt to resolve the dispute with the supplier. If you continue to have problems, please WRITE to us, describing in full what has happened and what attempts you've made to resolve the problem. While we can't promise that we'll settle the matter for you, we do regard the advertising in this publication as a service to our readers, and therefore, we do closely monitor complaints and criticisms concerning our advertisers.

next time

. . . *The Portable Companion* includes the first in a short series of articles on practical editing: how to cut, reorder, condense, add and polish your processed words. As a special feature we'll clue you freelance journalists in on how to submit articles electronically to newspapers and magazines. Other articles will include part three of "IO/IO" a screen graphics program and a graphics game in BASIC. We'll be passing on numerous technical tips in a special section devoted to shortcuts, and The Processed Word will concentrate on an evaluation of spelling checkers. Don't miss it.

daisy quality printing ... $249

Now you can turn your Olivetti Praxis-30 or -35 daisy wheel typewriter into a letter quality printer. The **OLIVE-1** provides your Praxis with a microprocessor-based, serial communications interface (RS-232C) compatible with most computers. It features a wide range of options and supports all typewriter functions, including the entire printable character set (KBI & KBII). Complete with interconnect/installation instructions and user guide. Wall socket plug-in power supply (9VDC/500mA) optional. Also available: **OLIVE-80**, a fully integrated Praxis-30 plus **OLIVE-1** typewriter/printer package for under $750.00.

FEATURES

- ***Hardware Handshake***
- ***Software Protocols*** (ETX/ACK or XON/XOFF)
- ***Selectable Baud Rates*** (110, 300, 1200)
- ***165 Character Buffer*** (full line at 15 cpi)
- ***Printing Pitch Selection*** (10, 12 & 15 cpi)
- ***Keyboard I & II Selection***
- ***Control over Praxis buzzer***
- ***RS-232C Configuration Options*** (TXD/RXD crossing; Carrier Detect Assert; Handshake via CTS or DTR)
- ***Paper-Out Indicator LED***
- ***Reset & Resume-Print Switches***
- ***Printing Speed: Approx. 12 cps***

The olive branch Association, Ltd.
26291 Production Ave., Ste. 205
Hayward, CA 94545, USA
(415) 887-5633

OLIVE-1 & OLIVE-80 are trademarks of The Olive Branch Association, Ltd.

Sources

The following computer-related books are available from bookstores or your local Osborne dealer. If you cannot locate a particular book, the publisher's address (where a complete catalog and current price list can be obtained) is included.

GENERAL INTEREST

Osborne User's Guide
Applications and Programming *
Leo Conrad
Lance Zimmerman
Larry J. Goldstein
Publisher:
Robert J. Brady Co.
A Prentice-Hall Publishing & Comm. Co.
Bowie, MD 20715

An Introduction to Microcomputers
The Beginner's Book
Adam Osborne
David Bunnell
Publisher:
Osborne/McGraw Hill
630 Bancroft Way
Berkeley, CA 94710

WORD PROCESSING

Introduction to WordStar
Arthur Naiman
Publisher:
Sybex
2344 Sixth Street
Berkeley, CA 94710

WordStar Made Easy
Walter A Ettlin
Publisher:
Osborne/McGraw Hill

Introduction to Word Processing
Hal Glatzer
Publisher:
Sybex

BASIC

Microsoft BASIC
Ken Knecht
Publisher:
Dilithium Press
P.O. Box 606
Beaverton, Oregon 97075

BASIC Programming
for the Financial Executive
Thomas J. Humphrey
Publisher:
John Wiley & Sons, Inc.
605 Third Avenue
New York, N.Y. 10158

CBASIC User Guide
Adam Osborne
Gordon Eubanks Jr.
Martin McNiff
Publisher:
Osborne/McGraw Hill

SUPERCALC

The Power of SuperCalc
Robert E. Williams
Bruce J. Taylor
Publisher:
Management Information Source
1626 N. Vancouver Avenue
Portland, OR 97227

CP/M

The CP/M Handbook
Rodney Zaks
Publisher:
Sybex

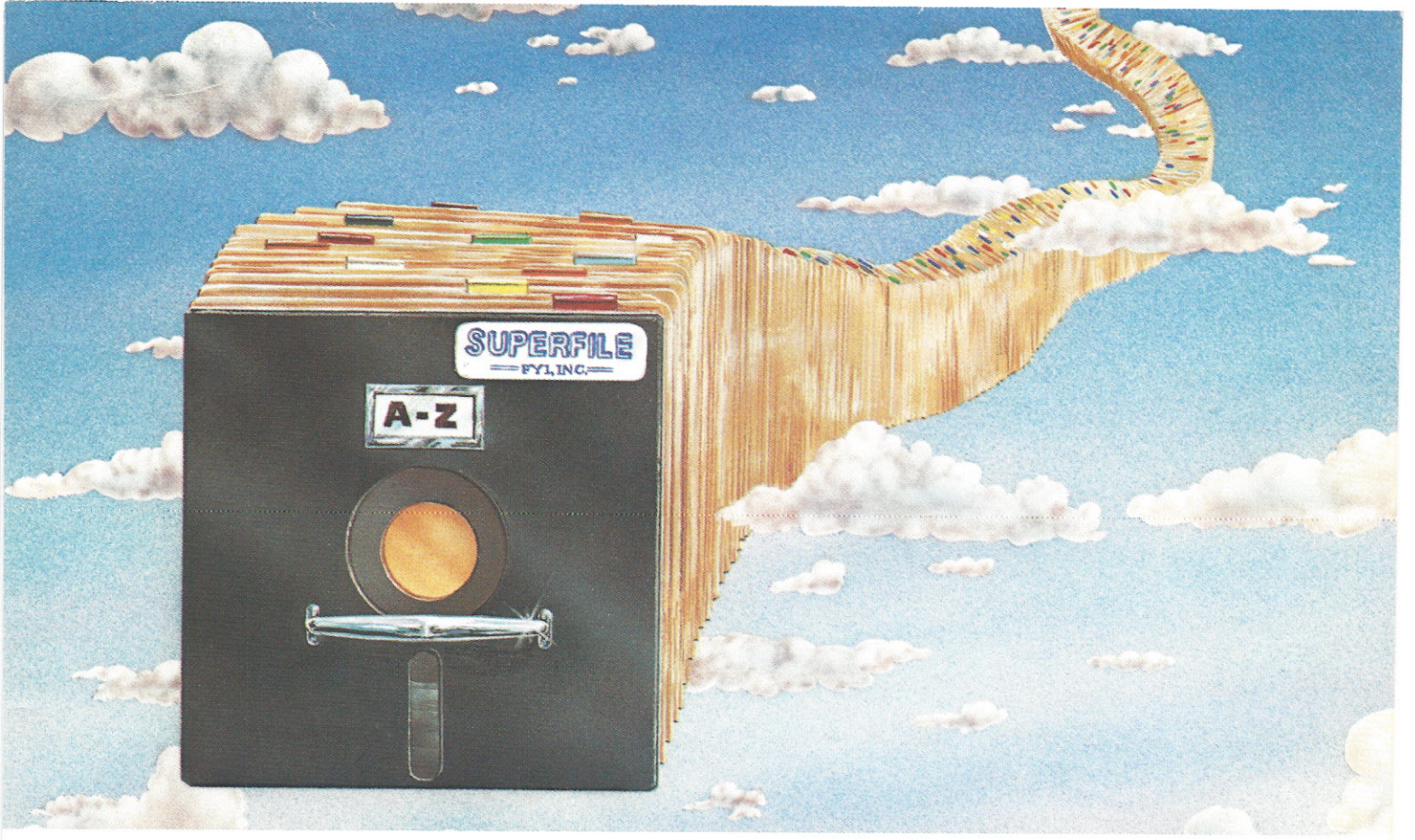
Osborne CP/M Users Guide
Thom Hogan
Publisher:
Osborne/McGraw Hill

Using CP/M
Judi N. Fernandez
Ruth Ashley
Publisher:
John Wiley & Sons, Inc.

Mastering CP/M
Alan R. Miller
Publisher:
Sybex

WHOOPS!

In the last issue we printed an incorrect phone number in our listing of remote CP/M bulletin boards. The OXGATE, Mountain View, CA number was shown as (415) 964-4097. IT SHOULD HAVE READ: (415) 965-4097. Unfortunately, the number listed was a private residence. Please correct your list and save these people further hassle.



dBase II® Tough?

SUPERFILE™ Makes Information Management Easy!

★ **No programming,** screen generators or "computerese"
★ **No "fields"** to restrict the order or content of your data
★ **No "forms"** to restrict the size or shape of your data
★ **No risk** with our MONEY BACK GUARANTEE

SUPERFILE is a totally **new** and **unique** concept in information management. SUPERFILE will make your information **productive** in ways you never thought possible.

Businesspeople, Doctors, Lawyers, Scientists, Researchers, Students – **whatever your particular application** – create data bases with all your text information; filing cabinet records, lead lists, correpondence, patient/client histories, case studies, journal astracts, notes, memos, even your thoughts and ideas. **The only limits are your imagination!**

SUPERFILE's **easy to follow** screen prompts and **award winning** operators manual let both beginning and experienced computer users make information management **trouble free.**

We're so confident that SUPERFILE will meet your information management needs that we guarantee your **complete satisfaction or you get your MONEY BACK!**

Only $195. See SUPERFILE today at your local computer dealer. Or for immediate delivery with MC/VISA, COD or PO# **call now toll free 1-800-531-5033.** Inside Texas and International 1-512-346-0133.

dBase II registerd trademark of Ashton-Tate, Inc. Osborne trademark of Osborne Computer Company, Inc. WordStar, Mail Merge registered trademark of MicroPro, Inc.

For your information . . . you can trust FYI, INC.
P.O. Box 26481, Austin, TX 78755

JMM Computer Peripheral Accessories for Osborne™...

These RS232C Serial Cables are especially designed to interface the Osborne computer system to the various serial devices used in the computer industry.

A coaxial type video cable is required for the high data rates transmitted by the Osborne. This quality cable enhances the display.

The EXMON II is a combination package and includes the EXMON and a UHF modulator. This allows the use of television sets as monitors without "hard wire" connections to the television set.

The Centronics printer cable allows the use of the IEEE-488 port as a centronics conformal interface for printers. This cable is 5' long and avoids the need for a serial to parallel interface in the printer.

The EXMON external monitor adapter is designed for the Osborne computer system, and enables the use of any standard video monitor with the Osborne 1 computer.

Padded carrying case to protect and ease handling and carrying.

The IEEE-488 adaptor cable provides the standard IEEE-488 interface connection to the Osborne 1 computer.

JMM Enterprises manufactures and distributes quality interface products for the Osborne. We provide Monitors, Printers, and STROBE™ Plotters. An EXMON adapter is also available for your HP-85.

The KEYBOARD EXTENDER cable is intended to increase the freedom of movement for the keyboard of the Osborne 1. This cable plugs into the Osborne 1's keyboard connector and then the keyboard cable plugs into the other end. The standard length is 24".

JMM enterprises, inc.

115 Battersby Street
Enumclaw, Washington 98022
(A Seattle suburb)
U.S.A.

(206) 825-1637

These products are in stock at local dealers. You may contact JMM directly for assistance. Overseas shipments are no problem.